S. Hrg. 98-1031

IMPORTANCE OF GREAT LAKES ENVIRONMENTAL QUALITY TO THE ECONOMY OF THE UPPER GREAT LAKES REGION

HEARING

BEFORE THE

SUBCOMMITTEE ON
ENTREPRENEURSHIP AND SPECIAL PROBLEMS
FACING SMALL BUSINESS

OF THE

COMMITTEE ON SMALL BUSINESS
UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

SECOND SESSION

ON

IMPORTANCE OF GREAT LAKES ENVIRONMENTAL QUALITY TO THE ECONOMY OF THE UPPER GREAT LAKES REGION

SUPERIOR, WI—AUGUST 28, 1984

Printed for the use of the Committee on Small Business

U.S. GOVERNMENT PRINTING OFFICE
38-740 O WASHINGTON : 1984

S721-21

COMMITTEE ON SMALL BUSINESS

LOWELL WEICKER, Jr., Connecticut, *Chairman*

BOB PACKWOOD, Oregon
ORRIN G. HATCH, Utah
RUDY BOSCHWITZ, Minnesota
SLADE GORTON, Washington
DON NICKLES, Oklahoma
WARREN RUDMAN, New Hampshire
ALFONSE M. D'AMATO, New York
BOB KASTEN, Wisconsin
LARRY PRESSLER, South Dakota

DALE BUMPERS, Arkansas
SAM NUNN, Georgia
WALTER D. HUDDLESTON, Kentucky
JAMES R. SASSER, Tennessee
MAX BAUCUS, Montana
CARL LEVIN, Michigan
PAUL E. TSONGAS, Massachusetts
ALAN J. DIXON, Illinois
DAVID L. BOREN, Oklahoma

ROBERT J. DOTCHIN, *Staff Director*
R. MICHAEL HAYNES, *Chief Counsel*
ALAN L. CHVOTKIN, *Minority Chief Counsel*

SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL PROBLEMS FACING SMALL BUSINESS

BOB KASTEN, Wisconsin, *Chairman*

LOWELL WEICKER, Jr., Connecticut
DAVID L. BOREN, Oklahoma

CONTENTS

Statement of Senator: Page
- Kasten, Hon. Bob, a U.S. Senator from the State of Wisconsin, and chairman of the Subcommittee on Entrepreneurship and Special Problems Facing Small Business 1

Statement of:
- Brown, David G., editor, Lakeland Boating Magazine, Port Clinton, OH..... 63
- Culley, Jack R., president, Sailboats, Inc., Superior, WI 38
- Hagen, Hon. Bruce C., mayor, city of Superior, Superior, WI..... 14
- Jensen, M. Lee, Superior Chamber of Commerce, Superior, WI..... 19
- Lump, Edward J., president, Wisconsin Tourism Federation, Madison, WI. 27
- Miller, Pat H., superintendent, Apostle Islands National Lakeshore, Bayfield, WI..... 58
- Nicholls, Dr. Leland L., department of habitational resources, University of Wisconsin-Stout..... 120
- Theno, Hon. Daniel, State senator, State of Wisconsin 130
- Tuttle, Hon. Donna F., Undersecretary of Commerce for Tourism, U.S. Department of Commerce..... 5

APPENDIX

Letter dated August 23, 1984, to Senator Robert Kasten, Committee on Small Business, from Dr. Chad P. Dawson, marine recreation/tourism agent, Sea Grant Program, University of Minnesota/Duluth, Duluth, MN 138

HEARING DATE

August 28, 1984:
- Morning session 1

IMPORTANCE OF GREAT LAKES ENVIRONMENTAL QUALITY TO THE ECONOMY OF THE UPPER GREAT LAKES REGION

TUESDAY, AUGUST 28, 1984

U.S. Senate,
Subcommittee on Entrepreneurship and
Special Problems Facing Small Business,
Committee on Small Business,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:06 a.m., in City Hall Chambers, 1407 Hammond Avenue, Superior, WI, Hon. Bob Kasten (chairman of the subcommittee) presiding.

Present: Senator Kasten.

Staff present: R. Michael Haynes, chief counsel; Alex Echols and Joelle Pochop, staff of Senator Kasten.

STATEMENT OF HON. BOB KASTEN, A U.S. SENATOR FROM THE STATE OF WISCONSIN, AND CHAIRMAN OF THE SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL PROBLEMS FACING SMALL BUSINESS

Senator **Kasten**. The hearing will come to order.

This field hearing of the Small Business Subcommittee on Entrepreneurship and Special Problems Facing Small Business will focus on a problem which is unique to the Great Lakes: the effects of the environmental quality of the Great Lakes on tourism in our region.

I think we all know that tourism is critically important for local economies, but we don't completely understand the importance of this sector of the economy on a larger scale. Furthermore, we know that the environmental quality of the region, particularly the Great Lakes, is one of the key attractions that draws people to this part of our State to enjoy their leisure time.

We have assembled today several panels of experts who, through their firsthand experience and their work in the recreation and tourism fields, are in positions to comment with authority on these and on other questions. And I hope that from today's hearings—I should say that I am optimistic—that from today's hearings we will produce a much more clear perspective on the importance of protecting the Great Lakes, not only to our way of life here in Wisconsin, but also to the health and to the vitality of our economy.

I am especially concerned about the interaction of tourism, the economy, and environmental quality. In fact, I have introduced legislation that would provide for the comprehensive environmental management of the Great Lakes. Because the Great Lakes are a multiple-use resource, I believe it is essential to investigate a variety of ways in which they enrich our lives. Not only am I concerned about environmental quality in its own right, but also in its impact on other areas. Clearly, environmental quality is linked to tourism, and tourism makes a substantial and, I believe, a positive contribution to our economy.

Not only is the health of our tourism industry affected by environmental quality, but some would suggest that tourism affects environmental quality. For example, I have heard several people comment that Wisconsin is a much nicer place to take a vacation than the coast of New England because there is still room for solitude here. We have not turned recreation into purely a commercial industry as has been done in some other places. Our lakeshores are not littered with fast food stores and gift shops, but we have preserved the natural attractions.

So, in Wisconsin I believe we are fortunate. We all want to protect our lakes, and it is natural and important that we do so, and the beauty of our lakes—the natural beauty of our lakes—and the beauty of this region is part of what attracts people to Wisconsin. I am deeply concerned, however, that environmental degradation could threaten our lakes and destroy many of the things we enjoy so much about them.

After hearing from today's panelists, I expect we will have a much better understanding of the lakes as a resource and the importance of tourism to our economy. With this understanding, I will be able to help shape policies in Congress to protect this very important part of our Wisconsin heritage.

Today we have a long list of witnesses, and we begin with the Honorable Donna F. Tuttle, who is the Under Secretary of Commerce for Tourism from Washington, DC. Then we have a panel which will discuss the regional importance of tourism. It will include Mayor Bruce Hagen; Lee Jensen from the chamber of commerce; and Ed Lump from Madison, representing the Wisconsin Tourism Federation.

Then our next group will be representatives of the tourism and recreation industry, and lastly, we are going to talk about the importance overall of tourism to the State.

So it is my great privilege to have before us as our opening witness on this hearing, on the importance of Great Lakes environmental quality to the economy of the Upper Great Lakes region, the Honorable Donna F. Tuttle. Donna is the Under Secretary of Commerce for Tourism from Washington, DC, with the U.S. Department of Commerce. And I commented this morning when I had a brief meeting with the mayor and others, that Donna might be the first under secretary—not only of Commerce, but of any of the Government agencies, to be in Superior for a number of years.

I want to thank you personally for coming, and we look forward to your testimony.

[The prepared statement of Senator Kasten follows:]

OPENING STATEMENT

U.S. SENATOR ROBERT W. KASTEN

SMALL BUSINESS COMMITTEE FIELD HEARING ON THE IMPORTANCE
OF GREAT LAKES ENVIRONMENTAL QUALITY TO THE ECONOMY OF
THE UPPER GREAT LAKES REGION

AUGUST 28, 1984

SUPERIOR, WISCONSIN

THIS FIELD HEARING OF THE SMALL BUSINESS SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL PROBLEMS FACING SMALL BUSINESS WILL FOCUS ON A PROBLEM WHICH IS UNIQUE TO THE GREAT LAKES: THE EFFECTS OF THE ENVIRONMENTAL QUALITY OF THE GREAT LAKES ON TOURISM IN THE REGION.

WE KNOW TOURISM IS CRITICALLY IMPORTANT TO THE LOCAL ECONOMY, BUT WE DO NOT COMPLETELY UNDERSTAND THE IMPORTANCE OF THIS SECTOR OF THE ECONOMY ON A LARGER SCALE. FURTHERMORE, WE KNOW THAT THE ENVIRONMENTAL QUALITY OF THIS REGION, PARTICULARLY OF THE GREAT LAKES, IS ONE OF THE KEY ATTRACTIONS THAT DRAWS PEOPLE TO THIS PART OF OUR STATE TO ENJOY THEIR LEISURE TIME.

WE HAVE ASSEMBLED SEVERAL PANELS OF EXPERTS WHO, THROUGH THEIR FIRSTHAND EXPERIENCE AND WORK IN THE RECREATION AND TOURISM FIELDS, ARE IN POSITIONS TO COMMENT WITH AUTHORITY ON THESE AND OTHER QUESTIONS. I HOPE THAT FROM TODAY'S HEARING WE WILL PRODUCE A MUCH MORE CLEAR PERSPECTIVE ON THE IMPORTANCE OF PROTECTING

THE GREAT LAKES NOT ONLY TO OUR WAY OF LIFE HERE IN WISCONSIN, BUT ALSO TO THE HEALTH AND VITALITY OF OUR ECONOMY.

I AM ESPECIALLY CONCERNED ABOUT THE INTERACTION OF TOURISM, THE ECONOMY, AND ENVIRONMENTAL QUALITY. IN FACT, I HAVE INTRODUCED LEGISLATION TO PROVIDE FOR THE COMPREHENSIVE ENVIRONMENTAL MANAGEMENT OF THE GREAT LAKES. BECAUSE THE GREAT LAKES ARE A MULTIPLE-USE RESOURCE, I BELIEVE IT IS ESSENTIAL TO INVESTIGATE A VARIETY OF WAYS IN WHICH THEY ENRICH OUR LIVES. NOT ONLY AM I CONCERNED ABOUT ENVIRONMENTAL QUALITY IN ITS OWN RIGHT, BUT ALSO IN ITS IMPACT ON OTHER AREAS. CLEARLY, ENVIRONMENTAL QUALITY IS LINKED TO TOURISM, AND TOURISM MAKES A SUBSTANTIAL AND POSITIVE CONTRIBUTION TO OUR ECONOMY.

NOT ONLY IS THE HEALTH OF OUR TOURISM INDUSTRY AFFECTED BY ENVIRONMENTAL QUALITY, BUT SOME WOULD SUGGEST THAT TOURISM AFFECTS ENVIRONMENTAL QUALITY. FOR EXAMPLE, I HAVE HEARD SEVERAL PEOPLE COMMENT THAT WISCONSIN IS A MUCH NICER PLACE TO TAKE A VACATION THAN THE COAST OF NEW ENGLAND BECAUSE THERE STILL IS ROOM FOR SOLITUDE HERE. WE HAVE NOT TURNED RECREATION INTO PURELY A COMMERCIAL INDUSTRY AS HAS BEEN DONE IN OTHER PLACES. OUR LAKESHORES ARE NOT LITTERED WITH FAST FOOD STORES AND GIFT SHOPS, BUT HAVE PRESERVED THE NATURAL ATTRACTIONS.

IN WISCONSIN I BELIEVE WE ARE FORTUNATE. WE ALL WANT TO PROTECT OUR LAKES, AND IT IS THEIR NATURAL BEAUTY AND VASTNESS THAT ATTRACTS US TO THEM. WE WILL NOT DESTROY THIS REGION BY ABUSING THE RECREATIONAL RESOURCE. I AM DEEPLY CONCERNED, HOWEVER, THAT ENVIRONMENTAL DEGREDATION COULD THREATEN OUR LAKES AND DESTROY MANY OF THE THINGS WE ENJOY SO MUCH ABOUT THEM.

AFTER HEARING FROM TODAY'S PANELISTS, I EXPECT WE WILL HAVE A MUCH BETTER UNDERSTANDING OF THE LAKES AS A RESOURCE AND THE IMPORTANCE OF TOURISM TO OUR ECONOMY. WITH THIS UNDERSTANDING, I WILL BE ABLE TO HELP SHAPE POLICIES IN CONGRESS TO PROTECT THIS VERY IMPORTANT PART OF WISCONSIN'S HERITAGE.

STATEMENT OF HON. DONNA F. TUTTLE, UNDER SECRETARY OF COMMERCE FOR TOURISM, U.S. DEPARTMENT OF COMMERCE

Ms. TUTTLE. Thank you for that nice introduction. Really, it's an honor for me to be here. This is my first time to Wisconsin and to the Great Lakes; and for one who is selling America to the rest of the world, I'm very glad that I have the chance to experience this first hand. So, indeed, I have enjoyed this.

Mr. Chairman, I am pleased to be here today to discuss the importance of the environmental quality in the Great Lakes to tourism, and the Small Business Committee in the Great Lakes region. Before I begin my remarks, Senator, I'd like to commend you on your longstanding record of support for tourism and small business. As a member of this committee, the National Ocean Policy Study, and the Senate Tourism Caucus, you have worked to address the concerns and problems of small businesses, as well as to ensure the environmental quality of our Nation.

The tourism industry is extremely important to the United States, contributing to our employment and economic prosperity and to our international trade and understanding. The industry is the third largest retail industry in the Nation and supports more than 6 million jobs. Small businesses comprise more than 97 percent of U.S. tourism establishments.

In Wisconsin, this is particularly true. Almost all of the State's tourism firms are small businesses. Tourism provides employment opportunities for people of diverse ages and skills and a high proportion of the opportunities are entry-level jobs. According to the latest figures available from the Wisconsin Division of Tourism, there were 30,465 tourism businesses, or more than one-quarter of the total retail service firms in the State in 1982. Sales related to tourism reached $6.39 billion during that year, and $197 million was collected in State sales taxes. As of 1981, 160,000 jobs were supported by the tourism industry.

In comparing the Great Lakes region with other regions of the country, the U.S. Travel Data Center reports that in 1983 the Great Lakes region, which includes Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin, generated the greatest number of U.S. tourists of any region in the country—21 percent. The region also had the greatest proportion of its residents traveling within it. According to our USTTA in-flight Survey, the Great Lakes region attracted 950,000 overseas visitors during 1983, or 12 percent of all overseas visitors to the United States. While two out of five of these travelers came from Europe, Japan produced the largest percentage of visitors from a single country—17.8 percent. West Germany had the second highest percentage, 8.2 percent.

These figures do not include visitors from Canada and Mexico. We estimate that 14,000 Mexicans visited the region during 1983.

I am submitting a chart showing a breakdown of the number of Canadian visitors to the region by State as an addendum to my testimony for inclusion in the record.

The importance of travel and tourism goes far beyond its economics. Wisconsin is a perfect example of why people want to come to America—its lakes, sports, and highlands; recreational opportunity; culture; history; and rugged individualism. We must protect and conserve the Nation's scenery and rural countryside, waterways, and natural and historic objects to maintain them for present use and enjoyment, and to leave them unimpaired for future generations. The maintenance of a high-quality resource is vital to the long-term success of tourism. The interests of tourism and the environment are inexplicably bound. You cannot have one without the other.

The National Tourism Policy Act of 1981 recognizes the need for conserving our Nation's natural resources, since the protection of air, water, land, and wildlife directly affect the development and quality of the tourist experience. Indeed, more than any other human activity, tourism relies on the natural environment for its very existence. Our national parks, national forests, and national wilderness areas are not only refuges from the cities into nature, but an important and integral part of our national heritage. These areas bring to all Americans a deeper understanding of nature, of our culture, and of the beginnings of our Nation.

Of our Nation's natural resources, it is hard to think of one that is more valuable than the Great Lakes. Lake Superior is the largest lake in America, and the second largest in the world. The Great Lakes provide food, recreation, beauty, and enjoyment. They contain 95 percent of the surface fresh water of the United States. The ecosystems of the Great Lakes provide sustenance and recreation to the people of the United States, as well as to the foreign visitors. Wisconsin alone has 860 miles of shoreline along Lake Superior and Lake Michigan.

The Great Lakes are the single most important tourism and recreational natural resource in the region. The quality of the water in the lakes is the most important factor in the region's attractiveness. The tourism and recreation industry is the second largest industry in Wisconsin. Other States in the region are similarly dependent on tourism and recreation activities to support their local economies. Moreover, as we move to a more service-oriented economy, these activities will become even more important.

In conclusion, maintenance of the environmental quality of the Great Lakes is indispensable to the economic vitality of tourism and recreation in the region. What the Great Lakes means to tourism is a chance to escape to the north coast, Wisconsin's inland seas, Lake Superior and Lake Michigan. Tourists are drawn to the best sailing, cruising, fishing, and exploring found anywhere in the world. The same waters that early explorers found breathtakingly beautiful hold a treasure of excitement for modern adventurers.

Better environmental quality for the Great Lakes will assure a vital tourism industry in the region.

Mr. Chairman, it is through your efforts that this will be achieved. I know you are also interested in how to assist firms dependent upon the Great Lakes for their economic survival. If you would like to ask me questions on that, I would certainly be glad to answer them.

Senator **KASTEN**. Donna, thank you.

[The prepared statement of Ms. Tuttle follows:]

TESTIMONY OF
THE HONORABLE DONNA F. TUTTLE
UNDER SECRETARY OF COMMERCE FOR TRAVEL AND TOURISM
BEFORE THE
SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL PROBLEMS FACING SMALL BUSINESS
U.S. SENATE

AUGUST 28, 1984
SUPERIOR, WISCONSIN

Mr. Chairman, I am pleased to be here today to discuss the importance of the environmental quality of the Great Lakes to tourism and the small business community in the Great Lakes region.

Before I begin my remarks, Senator, I want to commend you on your longstanding record of support for tourism and small business. As a member of this Committee, the National Ocean Policy Study and the Senate Tourism Caucus, you have worked to address the concerns and problems of small businesses as well as to ensure the environmental quality of our nation.

The tourism industry is extremely important to the United States -- contributing to our employment and economic prosperity and to our international trade and understanding. The industry is the third largest retail industry in the nation and supports more than six million jobs. Small businesses comprise more than 97 percent of U.S. tourism establishments.

In Wisconsin this is particularly true. Almost all of the state's tourism firms are small businesses. Tourism provides employment opportunities for people of diverse ages and skills, and a high proportion of the opportunities are in entry-level jobs. According to the latest figures available from the Wisconsin Division of Tourism, there were 30,465 tourist businesses (or more than one quarter of the total retail service firms in the state) in 1982. Sales related to tourism reached $6.39 billion during that year and $197 million was collected in state sales taxes. As of 1981, 160,000 jobs were supported by the tourism industry.

In comparing the Great Lakes region with other regions of the country, the U.S. Travel Data Center reports that in 1983, the Great Lakes region (which includes Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio and Wisconsin) generated the greatest number of U.S. tourists of any region in the country -- 21 percent. The region also had the greatest proportion of its residents traveling within it.

According to the USTTA's In-Flight Survey, the Great Lakes region attracted 950,000 overseas visitors during 1983, or over 12 percent of all overseas visitors to the United States. While two out of five of these travelers came from Europe, Japan produced the largest percentage of visitors from a single country -- 17.8 percent. West Germany had the second highest percentage -- 8.2 percent. These figures do not include visitors from Canada and Mexico. We estimate that 14,000 Mexicans visited the region during 1983. I am submitting a chart showing a breakdown of the number of Canadian visitors to the region by state as an addendum to my testimony for inclusion in the record.

The importance of travel and tourism goes far beyond economics. Wisconsin is a perfect example of why people want to come to America: it has lakes, forests and highlands, recreational opportunities, culture, history and rugged individualism.

We must protect and conserve the nation's scenery and rural countryside, waterways, and natural and historic objects to maintain them for present use and enjoyment and to leave them unimpaired for future generations. The maintenance of a high quality resource is vital for the long term success of tourism. The interests of tourism and the environment are inextricably bound. You cannot have one without the other.

The National Tourism Policy Act of 1981 recognizes the need for conserving our nation's natural resources since the protection of air, water, land and wildlife directly affects the development and quality of the tourist experience. Indeed, more than any other human activity, tourism relies on the natural environment for its very existence. Our national parks, national forests, and national wilderness areas are not only refuges from the cities into nature but important and integral parts of our national heritage. These areas bring to all Americans a deeper understanding of nature, of our culture, and of the beginnings of our nation.

Of our nation's natural resources, it is hard to think of one that is more valuable than the Great Lakes. Lake Superior is the largest lake in America and the second largest in the world. The Great Lakes provide food, recreation, beauty and enjoyment. They contain 95 percent of the surface freshwater of the United States. The ecosystems of the Great Lakes provide sustenance and recreation to the people of the United States as well as to foreign visitors. Wisconsin alone has 860 miles of shoreline along Lake Superior and Lake Michigan.

The Great Lakes are the single most important tourism and recreation natural resource in the region. The quality of the water in the lakes is the most important factor in the region's attractiveness. The tourism and recreation industry is the second largest industry in Wisconsin. Other states in the region are similarly dependent on tourism and recreation activities to support their local economies. Moreover, as we move to a more service-oriented economy, these activities will become even more important.

In conclusion, maintenance of the environmental quality of the Great Lakes is indispensable to the economic vitality of tourism and recreation in the region. What the Great Lakes means to tourists is a chance to escape to the North Coast, Wisconsin's inland seas, Lake Superior and Lake Michigan. Tourists are drawn to the best sailing, cruising, fishing, and exploring found anywhere in the world. The same waters that early explorers found breathtakingly beautiful hold a treasure of excitement for modern adventurers. Better environmental quality for the Great Lakes will, assure a vital tourism industry in the region. Mr. Chairman, it is through your efforts that this will be achieved.

ADDENDUM

1983 CANADIAN TOURISM TO THE GREAT LAKES REGION

State Visited	Number Tourists	# Person-Nights	Spending In State (millions U.S.)
Illinois	202,000	695,000	$29.3
Michigan	903,000	2,311,000	$57.3
Minnesota	365,000	1,006,000	$30.4
Ohio	502,000	1,214,000	$32.0
Indiana	96,000	307,000	$ 6.4
Wisconsin	120,000	348,000	$ 8.6
Iowa	39,000	123,000	$ 2.5

Senator Kasten. One of the things that we're trying to develop here is, first of all, to establish a common data base of all of the different Government agencies, including Department of Commerce and NOAA and others working on the Great Lakes. Second, we will use this information to develop a state of the lakes report and to produce cooperation between States and the Federal Government on lakes management.

I just wondered if, in your experience, you had seen other parts of the country—one that would come to mind would be the Chesapeake Bay—in which you have seen a kind of cooperative effort. If you could describe the kinds of cooperative efforts that you've seen and how that's affecting the tourism industry in those areas.

Ms. Tuttle. OK. First of all, we know definitely that the coastlines are one of the main attractions that both the domestic visitor and the international visitor have come to America for, because of the attraction of the waterlife and the scenery, and the Sun, and the water sports. Obviously, maintenance of this resource would be extremely important to the economic viability of tourism. Thank goodness, we probably haven't had serious or extensive environmental degradation, but we have seen a few areas, such as the oil spills in Santa Barbara, CA; the area in the Galveston area in Texas—and we have seen serious losses to the tourism industry because of those problems.

As you mentioned, we have, near Washington, DC, a less dramatic but still a very serious problem in the Chesapeake area. They have been able to form together with the Federal Government and the State and local governments to try and work out and best maintain the recreational fishing. It has been quite successful.

We also have seen that, even in the urban high density areas of the coastal areas—of the Mediterranean, Puerto Rico, and Acapulco—we've seen that the tourism industry has suffered as a result of the manmade environmental degradation.

We don't actually have an estimate of how much loss has incurred in terms of revenues or jobs, but we do know that it has been substantial. We do know that the EPA has done extensive studies on this, and they are looking at the effect that the oil spillage has had on the coastal areas. We know that NOAA itself is conducting programs to monitor and to determine the effect of water pollution—on the effective fish life of our Nation. I think that these are beginning to be efforts looking into it, and we've been working very closely with NOAA on efforts of this sort to try and determine what effect they have and how we can best act in a coordinated effort, which is what I think that you're after, too.

Senator Kasten. I want to ask this to Ed Lump later, but what kind of numbers do you have estimating the amount of money an average tourist spends? Do you have any sense of 1 day's or 1 week's spending or what the spinoff is? Can this be broken down further in terms of the amount that they might spend on their hotel room, and so forth compared to what they do in terms of shopping? I am just trying to get fundamental numbers on the impact that tourism and tourists have on the total economy.

Ms. Tuttle. In my area, which is the international visitor, he spends around $1,100 per trip; this is what we've determined, it's that much. And, of course, nationwide, that means close to $14 billion that the international visitor is bringing in of fresh, hard currency. He is paying $1.1 billion in taxes for us—again, that the foreigner is paying. And it generates over 160,000 jobs, so it's a tremendous amount of money that is very important to the economies of the States and to the Nation as a whole.

Senator **Kasten**. We just want a little bit more of that total money in Wisconsin.

Ms. **Tuttle**. After seeing the Great Lakes, definitely.

Senator **Kasten**. Let me say thank you once more to you for being here and for your testimony and for your interest. All of us look forward to working with you in Washington as we develop strategies and develop increasing coordination in our efforts to improve the tourism business in this area. Thank you very much for your testimony.

Ms. **Tuttle**. It was a pleasure to be here. Really, I would like to compliment Wisconsin because they do a marvelous job on tourism, and I know they're very involved in the regional effort; and it's been wonderful for our overseas office, working with the State of Wisconsin, and it's been tremendous. And thank you so much for your interest, too, in tourism. It's been wonderful.

Senator **Kasten**. We're very happy that you're here and we thank you.

Ms. **Tuttle**. Thank you.

Senator **Kasten**. The next panel will discuss the regional importance of tourism. Mayor Hagen, Ms. Jensen, and Mr. Lump, if you could all come forward together.

We'd like to begin this panel by saying that all of the witnesses have prepared testimony; in some cases they're going to be summarizing that testimony because we try to work within a 5-minute presentation rule so that there's opportunity for questions. If people in the audience or the media want copies of the testimony, we'll make that available to you today. In case we're running out of it, I'm sure we can make some arrangements to have things Xeroxed on copied; otherwise, we'll be able to provide that material to you today or later in the week.

We want to begin this panel on the regional importance of tourism with our host, the mayor of the city of Superior, a person who has gotten to be a friend, a person that's been working awfully hard, particularly for jobs in this area; and I just want to say, as someone who is sometimes on the other end of the telephone as we try to work for different kinds of grants and efforts and whatever, Bruce Hagen has been a real advocate for business and for jobs in this area. It is a pleasure for me to work with him.

Bruce, we are pleased and happy to have you lead off this regional panel. We thank you for your hospitality and for the job that you're doing.

Mayor Hagen.

STATEMENT OF HON. BRUCE C. HAGEN, MAYOR, CITY OF SUPERIOR, SUPERIOR, WI

Mr. **Hagen**. Thank you, Senator, and on behalf of the city of Superior and the people of northern Wisconsin, we are very pleased that you have brought this panel to the city of Superior and northern Wisconsin to hear and see what we have to offer and say with regard to the entrepreneurship in small business as it may pertain to the Great Lakes and tourism.

I also appreciate the efforts that you have personally conducted, with regard to your position, on behalf of the State of Wisconsin and the people of this area in particular.

My name is Bruce Hagen; I am the mayor of the city of Superior, WI. I wish to thank you for this opportunity to appear before the Senate Small Business Committee's Subcommittee on Entrepreneurship and Special Problems Facing Small Business.

Northern Wisconsin, particularly those areas or communities that are adjacent to water resources, have experienced the potential to expand, or in some cases, to establish an area of economic influence which relates directly to tourism. That influence is evident today in Superior, WI.

Our past history as a city has had with it a common theme, that being the reliance on water—specifically the Great Lakes, and for the past 25 years, the St. Lawrence Seaway system. That historical economy has had as one of its key elements an industrial transshipment relationship to the watercourse. In this light we are discussing shipbuilding and the bulk handling of natural resources—grains, iron ores, and other earthen products. That historical component of our economy is still important and hopefully will remain important as one of the mainstays in this area, but we have experienced, due primarily to the necessity to modernize with new technology, an ability to transship bulk products in great quantities and to do it with very few employment opportunities. Thus, the economy of the community has had to diversify.

With water being one of Superior's greatest assets, it was only logical to begin the process of diversification, keeping water in mind. This premise led to the establishment some 4 years ago of what we locally consider is one of the finest major tourist centers in northern Wisconsin; this is the Barkers Island complex.

The success of this project is due primarily to the unique nature of a municipally owned island, pristine in appearance, in the midst of a commercial harbor. The tourism value of Barkers Island—its marina, hotel, historical museum, and private shops—relates directly to the commercial harbor and the quality of the total environment.

Much can be said of the attractive value of this type of setting to Midwestern individuals and families. It is one which they cannot find in the midsection of the country. The city has found that tourists come to this area in part to escape the blistering climate of the lower Midwest States in the summer, and to share for a period of time the totally different environment that can be gathered throughout the Great Lakes basin. The combination of passive recreation and active recreation—be it sailing, power boating, fishing, the isolation that one can find, and the long beach areas of, in particular, the south shore of Lake Superior—bring about that restful environment that tourists so often seek.

The Barkers Island project has accomplished many goals for the community. The most passive of those goals relates to my previous comments concerning strictly the vacation traveler. Though that is obviously important, there are other community goals which that setting has advanced. The marina dockage customers, collectively, are individuals from both the immediate area as well as from outside the area. The major group of nonresident users of that facility is from the Minneapolis-St. Paul metropolitan area. Prior to the marina, many of the individuals currently berthing were not knowledgeable of what this area has to offer. Not only have they brought to the community their recreational investment in the form of pleasure boating, but they are bringing into the community, in some cases, the relocation and expansion of the family-owned small businesses which they operate. The ability to sell northern Wisconsin with its recreational quality of life is, I believe, important in the diversification of local economies along the lines of small business establishments and expansions.

As many in local government are aware, there are distinct advantages to a business in choosing Wisconsin. In part these relate to the tax structure of the State. Assuming that tangible business location factors are relatively equal throughout competing communities in Wisconsin, what may be the final factor in determining the location of a new facility is the intangible component. Northern Wisconsin, with its environment and with its recreational facilities, can be that intangible component of a business decision. We believe that part of the intangible decision for locating can be found on Barkers Island because of the true quality of the tourist-type recreation amenities available. Thus, northern Wisconsin could witness the establishment of new business opportunities of a more conventional nature following the establishment of those facilities or operations which are currently thought to follow, and not lead, commercial development.

For leisure-time businesses to establish, there needs to be a rethinking on the part of certain financing entities concerning the worthiness of that type of business. For example, the Economic Development Administration generally tries to shy away from recreation and tourism projects unless the importance of that project to the area where it is to be located can be documented. A similar type of test is not required of manufacturing concerns. Thus, from that agency's perspective, a manufacturing entity is of a higher value than a tourist facility, even though in some cases the tourist facility is the continuation of local economic growth.

My preceding remarks have related to the quality of the environment here. That quality needs to be maintained, but it needs to be maintained in a fashion that will insure both its consistency and the continued establishment and expansion of economic opportunities. Currently there are, in my opinion, far too many organizations on the local, county, regional, State, and Federal levels which try to regulate both the quality of the environment and economic expansion. Often it has been our experience that there are conflicting values, conflicting interpretations, and even conflicting regulations as to how either the environment can be maintained or how the economy can be strengthened. It would be so beneficial to communities such as Superior if this kind of overlapping jurisdictions, for lack of a better term, could be abrogated.

The condition of overlapping jurisdictions, overlapping review, and overlapping permits can seriously delay the establishment of additional employment opportunities adjacent to the Lakes. This was evidenced through the establishment of Barkers Island as it is today. Unless private sector business has the foresight to make contact with a learned unit of Government, quite often development plans will be hindered, delayed or curtailed due to the amount of time required to receive permission from all of those agencies involved. A single entity established on the Federal level which would act in a fashion similar to the former Regional Planning Commission's role under the A-95 process would greatly curtail this overlap. Though it would be a positive step to reduce the overlapping nature of jurisdictions on the Federal level, it would be equally important to bring into this setting, if at all possible, certain State regulatory functions.

In summary, the establishment, retention, and growth of tourism is crucially important to the economy of northern Wisconsin. That sector of Superior's economic base, in this case, relies on a quality environment. The retention of that environment should be used as a guide, not as an obstacle. Neither should the individual bureaucracies be such that they can hide behind the environment so that development is curtailed.

Senator, once again I thank you for the opportunity, as well as your interest, and I would be happy to answer any questions that may arise.

Senator KASTEN. Thank you very much.

[The prepared statement of Mr. Hagen follows:]

STATEMENT OF HON. BRUCE C. HAGEN, MAYOR, CITY OF SUPERIOR, SUPERIOR, WI

Good morning Chairman Kasten, fellow Committee members, and staff. My name is Bruce Hagen, and I am the Mayor of Superior, Wisconsin. I wish to thank you for this opportunity to appear before the Senate Small Business Committee's Subcommittee on Entrepreneurship and Special Problems Facing Small Business.

Northern Wisconsin, particularly those areas or communities that are adjacent to water resources, have experienced the potential to expand, or in some cases, to establish an area of economic influence which relates directly to tourism. That influence is evident today in Superior, Wisconsin.

Our past history as a city has had with it a common theme, that being the reliance on water—specifically the Great Lakes, and for the past 25 years, the St. Lawrence Seaway System. That historical economy has had as one of its key elements an industrial transshipment relationship to the watercourse. In this light we are discussing shipbuilding and the bulk handling of natural resources, grains, iron ores, and their earthen products. That historical component of our economy is still important and hopefully will remain important as one of the mainstays in this area, but we have experienced, due primarily to the necessity to modernize with new technology, an ability to transship bulk products in great quantities and to do it with very few employment oppportunities. Thus, the economy of the community has had to diversify.

With water being one of Superior's greatest assets, it was only logical to begin the process of diversification, keeping water in mind. This premise led to the establishment some four years ago of what we locally consider is one of the finest major tourist centers in northern Wisconsin; this is the Barkers Island complex.

The success of this project is due primarily to the unique nature of a municipally-owned island, pristine in appearance, in the midst of a commercial harbor. The tourism of Barkers Island—its marina, hotel, historical museum, and private shops—relates directly to the commercial harbor and the quality of the total environment.

Much can be said of the attractive value of this type of setting to Midwestern individuals and families. It is one which they cannot find in the mid-section of the country. The City has found that tourists come to this area in part to escape the blistering climate of the lower Midwest states in the summer, and to share for a period of time the totally different environment that can be gathered throughout the Great Lakes basin. The combination of passive recreation and active recreation—be it sailing, power boating, fishing, the isolation that one can find, and the long beach areas of, in particular, the south shore of Lake Superior—bring about that that restful environment that tourists so often seek.

The Barkers Island project has accomplished many goals for the community. The most passive of those goals relates to my previous comments concerning strictly the vacation traveler. Though that is obviously important, there are other community goals which that setting has advanced. The marina dockage customers, collectively, are individuals from both the immediate area as well as from outside of the area. The major group of nonresident users of that facility is from the Minneapolis/St. Paul metropolitan area. Prior to the marina, many of the individuals currently berthing were not knowledgeable of what this area has to offer. Not only have they brought to the community their recreational investment in the form of pleasure boating, but they are bringing into the community, in some cases, the relocation and expansion of the "family-owned" small businesses which they operate. The ability to sell northern Wisconsin with its recreational quality of life is, I believe, important in the diversification of local economies along the lines of small business establishments and expansions.

As many in local government are aware, there are distinct advantages to a business in choosing Wisconsin. In part these relate to the tax structure of the State. Assuming that tangible business location factors are relatively equal throughout competing communities in Wisconsin, what may be the final factor in determining the location of a new facility is the intangible component. Northern Wisconsin, with its environment and with its recreational facilities, can be that intangible component of a business decision. We believe that part of the intangible decision for locating can be found on Barkers Island because of the true quality of the tourist-type recreation amenities available. Thus, northern Wisconsin could witness the establishment of new business opportunities of a more conventional nature following the establishment of those facilities or operations which are currently thought to follow, and not lead, commercial development.

For leisure-time businesses to establish, there needs to be a "rethinking" on the part of certain financing entities concerning the worthiness of that type of business. For example, the Economic Development Administration generally tries to shy away from recreation and tourism projects unless the importance of that project to the area where it is to be located can be documented. A similar type of test is not required of manufacturing concerns. Thus, from that agency's perspective, a manufacturing entity is of a higher value than a tourist facility, even though in some cases the tourist facility is the continuation of local economic growth.

My preceding remarks have related to the quality of the environment here. That quality needs to be maintained, but it needs to be maintained in a fashion that will insure both its consistency and the continued establishment and expansion of economic opportunities. Currently there are, in my opinion, far too many organizations on the local, county, regional, state and federal levels which try to regulate both the quality of the environment and economic expansion. Often it has been our experience that there are conflicting values, conflicting interpretations, and even conflicting regulations as to how either the environment can be maintained or how the economy can be strengthened. It would be so beneficial to communities such as Superior if this kind of "overlapping jurisdictions," for lack of a better term, could be abrogated.

The condition of overlapping jurisdictions, overlapping review, and overlapping permits can seriously delay the establishment of additional employment opportunities adjacent to the Lakes. This was evidenced through the establishment of Barkers Island as it is today. Unless private sector business has the foresight to make contact with a "learned unit of government," quite often development plans will be hindered, delayed or curtailed due to the amount of time required to receive permission from all of those agencies involved. A single entity established on the Federal level which would act in a fashion similar to the former regional planning commission's rule under the A-95 process would greatly curtail this overlap. Though it would be a positive step to reduce the overlapping nature of jurisdiction on the federal level, it would be equally important to bring into this setting, if at all possible, certain State regulatory functions.

In summary, the establishment, retention, and growth of tourism is crucially important to the economy of northern Wisconsin. That sector of Superior's economic base, in this case, relies on a quality environment. The retention of that environment should be used as a guide, not as an obstacle. Neither should the individual bureaucracies be such that they can hide behind the environment so that development is curtailed.

Senator, I thank you for the opportunity to appear today at this hearing and to present this testimony. I will be happy to answer any questions you may have concerning it.

Senator **Kasten**. Thank you very much. I think what we will do is go through the prepared testimony and the summaries of the three people on this panel and then ask you questions jointly.

We apologize, Lee, for the nametag; I'm sure it's the first time it's ever happened to you in your life, but we're very happy to have Lee Jensen representing the Superior Chamber of Commerce as our next witness.

STATEMENT OF M. LEE JENSEN, SUPERIOR CHAMBER OF COMMERCE, SUPERIOR, WI

Ms. **Jensen**. Senator Kasten, distinguished members of the panel, ladies and gentlemen, good morning. I am very pleased to be here this morning to testify before the Senate Small Business Committee's Subcommittee on Entrepreneurship and Special Problems Facing Small Business, as well as to share with you the importance of the tourism industry to northern Wisconsin, particularly as it relates to the counties of Ashland, Bayfield, and Douglas, or those bordering Lake Superior. I am also pleased to address the Save The Great Lakes Act of 1984, as introduced by Senator Kasten on June 11, 1984, as it relates to coordinated management and rehabilitation of the Great Lakes

Recent figures from the Wisconsin Department of Development and the Department of Revenue indicate that gross sales of the hospitality, recreation, and tourism industry by county mean approximately $160 million annually to all three counties. The hospitality, recreation, and travel industry also generates approximately 24 percent of all jobs in Douglas County, 34 percent of all jobs in Bayfield County, and 11 percent of all jobs in Ashland County. Figures from the department of development also indicate that it takes approximately $24,000 to create a new job in the tourism industry, or the equivalent of bringing in approximately 60 people to an area for a 1-week stay. Obviously the employment generated by tourism establishments constitutes a meaningful share of total county employment in all three counties.

In considering who our customers are, it's obvious that our primary market area is Minneapolis-St. Paul. Secondary markets include Eau Claire, La Crosse, Madison, Milwaukee, and Chicago as a distant third.

While communities have generally adopted local room tax ordinances to fund their marketing efforts, inadequate promotional dollars are often cited as a major problem in attracting people—not only to our region, but to Wisconsin as well, particularly since we must compete with multimillion dollar advertising campaigns directed at attracting our customers to Canadian Provinces for their vacations.

The tourism industry continues to grow in importance, however, as community, State, and national leaders become more aware of our dependence on the travel industry for employment. Personally, I would have to attribute in large part the growth of the tourism industry in northern Wisconsin to the Upper Great Lakes Regional Commission and their foresight in the 1970's in assisting the northern counties of Michigan, Wisconsin, and Minnesota in developing the area's potential for tourism development. The Upper Great Lakes Regional Commission funded the initial development of the Lake Superior Tourism Office in Ashland which now serves the northern 36 counties of Wisconsin in tourism-related developments. The commission funded familiarization tours to the area for newspaper and magazine feature writers, which we're still benefitting from. The commission funded the Wisconsin-Indian Head Technical Institute—Ashland Campus—Hospitality Management Program which continues to provide trained employees and managers for tourism-related fields in such areas as hotel management, restaurant and bar management.

The commission also funded feasibility studies for marina development and those marina projects became a reality for the communities of Bayfield, Washburn, and Superior. As a result, over 400 new overnight accommodations have been built in Ashland, Washburn, Bayfield, and Superior in the last several years which has also led to restaurant development, retail developments like the Barkers Island complexes, and new attractions like the fire hall museum in Superior or the civic center in Ashland, that can also facilitate convention and meeting business.

But dollars for those developments are hard to come by.

While the Upper Great Lakes Regional Commission was a success in its efforts to develop tourism in the northern counties of Minnesota, Wisconsin, and Michigan, there hasn't been another agency that has quite taken its place in tourism development. While EDA, UDAG, community development block grant funds and SBA moneys are available for economic development and expansion, those dollars are earmarked for labor-intensive businesses. The Farmers Home Administration, for example, won't even take applications from tourism-related businesses that provide entry level jobs in the marketplace.

Small business owners are asking that leaders and lenders become more cognizant. of tourism as an industry, and provide, once again, dollars for expansion and development of tourism-related businesses as the Upper Great Lakes Regional Commission did in the 1970's.

On a regional basis, the Great Lakes States compete domestically for customers, but recent meetings of the Great Lakes Association of Travel Directors has led to cooperative efforts to develop international markets in Japan and Germany, citing the Great Lakes as our major drawing card in selling the region as a tourism destination. Drawing on the U.S. Travel and Tourism Agency as a facilitator, however, it is appalling to note that the Agency's budget is smaller than most individual States' advertising budgets. If you are serious about promoting the Great Lakes region while still protecting it, I suggest an increased USTTA budget to work with State travel directors and develop a long-range marketing plan to capitalize on the multibillion dollar foreign travel industry while protecting our greatest resource, the Great Lakes.

On an environmental basis, the small business owners are concerned primarily with the recent *Voight* decision which gave Native Americans the extended hunting and fishing privileges. While I will not offer a personal viewpoint on the issue, the problem—whether real or perceived—is affecting the tourism industry in northern Wisconsin, and I urge you to work with Native American leaders, our Department of Natural Resources, and sports groups to manage the problem now.

Contaminants are a source of real concern and cast a pall over the social and economic aspects of Great Lakes fisheries. They have created a real problem for commercial fishermen, processors, and retailers; a shadow of doubt in the minds of consumers; an added question for the fishery manager; a symbol of defeat for the pollution control agencies; and a mark for every environmental management critic to flaunt as an example of the failure of the system. I am happy to say that that problem is now turning around, with the help of a great many agencies.

Wisconsin is known for being tough but fair in its environmental regulatory process, and we urge consistent, tough but fair policy development throughout the Great Lakes States as it relates to environmental protection of our greatest resource, the Great Lakes.

While we continue to rely heavily on this resource for transportation, world commerce, and power, its use goes beyond that as the growth of the tourism industry in the Great Lakes States attests. New harbors of refuge and marinas have developed, along with restaurants, motels, parks, retail establishments, and a variety of tourist attractions unique to the Great Lakes States. All those developments have also created jobs. I am pleased that this subcommittee, chaired by Senator Kasten, is interested in playing such a significant role in promoting and protecting the Great Lakes States through the Save the Lakes Act of 1984.

For seeking our input and for your continued support of Wisconsin's tourism industry, I thank you.

Senator **Kasten**. We thank you. We will come back for some questions, but thank you for the very thoughtful testimony. That was extremely helpful.

[The prepared statement of Ms. Jensen follows:]

IT'S SUPERIOR

"Where Sail Meets Rail"

M. LEE JENSEN
SUPERIOR CHAMBER OF COMMERCE
1419 TOWER AVENUE
SUPERIOR, WISCONSIN 54880

TESTIFYING BEFORE THE SENATE SMALL BUSINESS COMMITTEE'S SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL PROBLEMS FACING SMALL BUSINESS ON AUGUST 28, 1984.

SENATOR KASTEN, DISTINGUISHED MEMBERS OF THE PANEL, LADIES AND GENTLEMEN GOOD MORNING! I'M VERY PLEASED TO BE HERE THIS MORNING TO SHARE WITH YOU THE IMPORTANCE OF THE TOURISM INDUSTRY TO NORTHERN WISCONSIN, PARTICULARLY AS IT RELATES TO THE COUNTIES OF ASHLAND, BAYFIELD, AND DOUGLAS-OR THOSE BORDERING LAKE SUPERIOR. I'M ALSO PLEASED TO ADDRESS THE "SAVE THE LAKES ACT OF 1984" AS INTRODUCED BY SENATOR KASTEN ON JUNE 11, 1984 AS IT RELATED TO COORDINATED MANAGEMENT AND REHABILITATION OF THE GREAT LAKES.

RECENT FIGURES FROM THE WISCONSIN DEPARTMENT OF REVENUE AND THE WISCONSIN DEPARTMENT OF DEVELOPMENT INDICATE THAT GROSS SALES OF THE HOSPITALITY, RECREATION AND TOURISM INDUSTRY BY COUNTY MEANS APPROXIMATELY $116,500,000 TO ALL THREE COUNTIES BROKEN DOWN AS FOLLOWS:

	PURE TOURISM SPENDING	24% AUTOMOTIVE & GASOLINE	6% VENDING, FOOD DEPT STORE, LIQUOR	TOTAL
DOUGLAS	$44,000,000	$30,000,000	$3,000,000	$77,000,000
BAYFIELD	14,000,000	2,000,000	900,000	16,900,000
ASHLAND	16,000,000	4,600,000	2,000,000	22,600,000
TOTAL	$74,000,000	$36,600,000	$5,900,000	$116,500,000

THE HOSPITALITY, RECREATION AND TRAVEL INDUSTRY ALSO GENERATED APPROXIMATELY 24% OF ALL JOBS IN DOUGLAS COUNTY, 34% OF ALL JOBS IN BAYFIELD COUNTY AND 11 % OF JOBS IN ASHLAND COUNTY.

FIGURES FROM THE DEPARTMENT OF DEVELOPMENT ALSO INDICATE THAT IT TAKES $24,059 TO CREATE A NEW JOB IN THE TOURISM INDUSTRY-OR THE EQUIVALENT OF BRINGING IN 60 PEOPLE FOR ONE WEEK'S STAY.

OBVIOUSLY, THE EMPLOYMENT GENERATED BY TOURISM ESTABLISHMENTS CONSTITUTES A MEANINGFUL SHARE OF TOTAL COUNTY EMPLOYMENT IN ALL THREE COUNTIES.

IN CONSIDERING WHO OUR CUSTOMERS ARE, IT'S OBVIOUS THAT OUR PRIMARY MARKET AREA IS MINNEAPOLIS/ST. PAUL. SECONDARY MARKETS INCLUDE EAU CLAIRE, LACROSSE, MADISON, MILWAUKEE AND CHICAGO AS A DISTANT THIRD. WHILE COMMUNITIES HAVE GENERALLY ADOPTED LOCAL ROOM TAX ORDINANCES TO FUND THEIR MARKETING EFFORTS, INADEQUATE PROMOTIONAL DOLLARS ARE OFTEN CITED AS A MAJOR PROBLEM IN ATTRACTING PEOPLE NOT ONLY TO OUR REGION BUT TO WISCONSIN AS WELL-PARTICULARLY SINCE WE MUST COMPETE WITH MULTI-MILLION DOLLAR ADVERTISING CAMPAIGNS DIRECTED AT ATTRACTING OUR CUSTOMERS TO CANADA FOR THEIR VACATIONS.

THE TOURISM INDUSTRY CONTINUES TO GROW IN IMPORTANCE, HOWEVER, AS COMMUNITY, STATE AND NATIONAL LEADERS BECOME AWARE OF OUR DEPENDENCE ON THE TRAVEL INDUSTRY FOR EMPLOYMENT. PERSONALLY, I WOULD HAVE TO ATTRIBUTE THE GROWTH OF THE TOURISM INDUSTRY IN NORTHERN WISCONSIN TO THE EFFORTS OF THE UPPER GREAT LAKES REGIONAL COMMISSION AND THEIR FORESIGHT IN THE 1970'S IN ASSISTING THE NORTHERN COUNTIES OF MICHIGAN, WISCONSIN AND MINNESOTA IN DEVELOPING THE AREA'S POTENTIAL FOR TOURISM DEVELOPMENT.

THE UPPER GREAT LAKES REGIONAL COMMISSION FUNDED THE INITIAL DEVELOPMENT OF THE LAKE SUPERIOR TOURISM OFFICE IN ASHLAND WHICH NOW SERVES THE NORTHERN 36 COUNTIES IN TOURISM RELATED DEVELOPMENTS. THE COMMISSION FUNDED FAMILIARIZATION TOURS TO THE AREA FOR NEWSPAPER AND MAGAZINE FEATURE WRITERS WHICH WE'RE STILL BENEFITING FROM. THE COMMISSION FUNDED THE WISCONSIN INDIANHEAD TECHNICAL INSTITUTE, WHICH PROVIDES TRAINED EMPLOYEES FOR THE TOURISM FIELD IN SUCH AREAS AS HOTEL MANAGEMENT, RESTAURANT AND BAR MANAGEMENT. THE COMMISSION ALSO FUNDED FEASIBILITY STUDIES FOR MARINA DEVELOPMENT AND THOSE MARINA PROJECTS BECAME A REALITY FOR THE COMMUNITIES OF BAYFIELD, WASHBURN, AND SUPERIOR.

AS A RESULT, OVER 400 NEW OVERNIGHT ACCOMODATIONS HAVE BEEN BUILT IN ASHLAND, WASHBURN, BAYFIELD AND SUPERIOR IN THE LAST SEVERAL YEARS WHICH HAS ALSO LED TO RESTAURANT DEVELOPMENT, RETAIL DEVELOPMENT LIKE THE BARKERS ISLAND WHARF SHOPS AND NEW ATTRACTIONS LIKE THE FIREHALL MUSEUM IN SUPERIOR OR THE CIVIC CENTER IN ASHLAND THAT CAN ALSO FACILITATE CONVENTION AND MEETING BUSINESS. BUT DOLLARS FOR THOSE DEVELOPMENTS ARE HARD TO COME BY.

WHILE THE UPPER GREAT LAKES REGIONAL COMMISSION WAS A SUCCESS IN IT'S EFFORTS TO DEVELOPE TOURISM IN THE NORTHERN COUNTIES OF MINNESOTA, WISCONSIN AND MICHIGAN, THERE HASN'T BEEN ANOTHER AGENCY THAT'S TAKEN ITS PLACE.

WHILE EDA, UDAG, CDBG AND SBA MONIES ARE AVAILABLE FOR ECONOMIC DEVELOPMENT AND EXPANSION THOSE DOLLARS ARE EARMARKED FOR LABOR INTENSIVE BUSINESS.

THE FARMER'S HOME ADMINISTRATION. FOR EXAMPLE WON'T EVEN TAKE APPLICATIONS FROM TOURISM RELATED BUSINESSES THAT PROVIDE ENTRY LEVEL JOBS IN THE MARKETPLACE.

SMALL BUSINESS OWNERS ARE ASKING THAT LEADERS AND LENDERS BECOME MORE COGNIZANT OF TOURISM AS AN INDUSTRY AND PROVIDE, ONCE AGAIN, DOLLARS FOR EXPANSION AND DEVELOPMENT OF TOURISM RELATED BUSINESS AS THE UPPER GREAT LAKES COMMISSION DID IN THE 1970'S.

ON A REGIONAL BASIS, THE GREAT LAKES STATES COMPETE DOMESTICALLY FOR CUSTOMERS, BUT RECENT MEETINGS OF THE GREAT LAKES ASSOCIATION OF TRAVEL DIRECTORS HAS LED TO COOPERATIVE EFFORTS TO DEVELOP INTERNATIONAL MARKETS IN JAPAN AND GERMANY-CITING THE GREAT LAKES AS OUR MAJOR DRAWING CARD IN SELLING THE REGION AS A TOURISM DESTINATION. DRAWING ON THE U.S. TRAVEL AND TOURISM AGENCY AS A FACILITATOR, HOWEVER, IT'S APPALLING TO NOTE THAT THE AGENCY'S BUDGET IS SMALLER THAN MOST INDIVIDUAL STATE'S ADVERTISING BUDGETS. IF YOU'RE SERIOUS ABOUT PROMOTING THE GREAT LAKES REGION WHILE PROTECTING IT, I SUGGEST AN INCREASED U.S.T.T.A BUDGET TO WORK WITH STATE TRAVEL DIRECTORS AND DEVELOPE A LONG RANGE MARKETING PLAN TO CAPITALIZE ON THE MULTI-BILLION DOLLAR FOREIGN TRAVEL INDUSTRY WHILE PROTECTING OUR GREATEST RESOURCE.

ON AN ENVIRONMENTAL BASIS, THE SMALL BUSINESS OWNERS ARE CONCERNED PRIMARILY WITH THE RECENT VOIGHT DECISION WHICH GAVE NATIVE AMERICANS THE EXTENDED HUNTING AND FISHING PRIVILEGES. WHILE I WILL NOT OFFER A PERSONAL VIEWPOINT ON THE ISSUE, THE PROBLEM, WHETHER REAL OR PRECEIVED, IS AFFECTING THE TOURISM INDUSTRY IN NORTHERN WISCONSIN AND I URGE YOU TO WORK WITH NATIVE AMERICAN LEADERS, OUR DEPARTMENT OF NATURAL RESOURCES AND SPORTS GROUPS TO MANAGE THE PROBLEM NOW.

CONTAMINANTS ARE A SOURCE OF REAL CONCERN AND CAST A PALL OVER THE SOCIAL AND ECONOMIC ASPECTS OF GREAT LAKES FISHERIES. THEY HAVE CREATED A REAL PROBLEM FOR COMMERCIAL FISHERMEN, PROCESSORS AND RETAILERS; A SHADOW OF DOUBT IN THE MINDS OF CONSUMERS; AN ADDED QUESTION FOR THE FISHERY MANAGER; A SYMBOL OF DEFEAT FOR THE POLLUTION CONTROL AGENCIES AND A MARK FOR EVERY ENVIRONMENTAL MANAGEMENT CRITIC TO FLAUNT AS AN EXAMPLE OF THE FAILURE OF THE SYSTEM. I'M HAPPY TO SAY THAT THAT'S NOW TURNING AROUND.

WISCONSIN IS KNOWN FOR BEING TOUGH, BUT FAIR IN ITS ENVIRONMENTAL REGULATORY PROCESS AND WE URGE CONSISTENT, TOUGH BUT FAIR POLICY DEVELOPMENT THROUGHOUT THE GREAT LAKES STATES AS IT RELATES TO ENVIRONMENTAL PROTECTION OF OUR GREATEST RESOURCE-THE GREAT LAKES.

WHILE WE CONTINUE TO RELY HEAVILY ON THIS RESOURCE FOR TRANSPORTATION, COMMERCE AND POWER, IT'S USE GOES BEYOND THAT AS THE GROWTH OF THE TOURISM INDUSTRY IN THE GREAT LAKES STATES ATTESTS.

NEW HARBORS OF REFUGE AND MARINAS HAVE DEVELOPED ALONG WITH RESTAURANTS, MOTELS, PARKS, RETAIL ESTABLISHMENTS AND A VARIETY OF TOURIST ATTRACTIONS UNIQUE TO THE GREAT LAKES STATES. ALL THOSE DEVELOPMENTS HAVE CREATED JOBS. I'M PLEASED THAT THIS SUBCOMMITTEE, CHAIRED BY SENATOR KASTEN, IS INTERESTED IN PLAYING SUCH A SIGNIFICANT ROLE IN PROMOTING AND PROTECTING THE GREAT LAKES THROUGH THE "SAVE THE LAKES ACT OF 1984".

FOR SEEKING OUR INPUT, I THANK YOU.

Senator **Kasten**. Our next witness on the subject of the regional importance of tourism is Mr. Ed Lump, who is the president of the Wisconsin Tourism Federation out of Madison, WI. Ed, we thank you for being here today and we look forward to your testimony.

STATEMENT OF EDWARD J. LUMP, PRESIDENT, WISCONSIN TOURISM FEDERATION, MADISON, WI

Mr. **Lump**. Thank you very much. I need to add in the beginning here that I am the actual paid executive vice president of the Wisconsin Restaurant Association, which has approximately 5,000 members in Wisconsin. The restaurant industry is a major part of tourism and, of course, major supporters of tourism through the Wisconsin Tourism Federation. As you said, I am here today speaking as president of the tourism federation.

We are primarily a political coalition of member organizations that are heavily involved in tourism. WTF was formed to disseminate information about political issues involving our individual groups and the entire tourism industry, and to lobby for tourism issues of common interest.

I have listed, in my testimony, the members of the federation. I'm not going to read that to you right now, but suffice it to say that many groups in this part of the State are heavy inputers into our political positions, such as the Wisconsin-Indian Head Tourism Region, the Northwoods Council, and so forth.

When it comes to working successfully to promote tourism in Wisconsin, WTF is probably the most important organization in the State. Whether we are trying to get local people to stay in Wisconsin or lure tourists from adjoining States, the rest of the Nation, or the rest of the world, tourism promotion needs proper funding and a congenial, economic climate. WTF is virtually the only nongovernmental organization in Wisconsin working for that funding and climate.

Having looked at this background, we will turn to the importance of tourism in this region of Wisconsin and special factors that we think come into play in this area.

In terms of sales, the impact of hospitality, recreation, and tourism on the local economy, 11 of the top 24 tourism impact counties in Wisconsin are in the northern part of the State. I have attached a map that shows that. They are, with their rankings—1st is Vilas; 6th is Sawyer; 8th is Ashland; 9th is Florence; 10th is Iron; 11th is Langlade; 12th is Oneida; 14th is Bayfield; 15th is Burnett; 19th is Washburn, and 24th is Douglas. Of these, 11 of the top 24, 7 are in northwestern Wisconsin.

It is interesting to note that with the exception of Douglas County, ranking 23d, none of these counties ranks in the top 24 for tourist spending. In other words, while it has a major impact in this part of the State with the spending of the tourist contributing to the economy and the jobs, only Douglas County—it is ranked 23d—is in the top 24 in receiving the tourist dollars. The situation is that tourism is of far greater economic importance in the northern part of Wisconsin than the southern part. More tourist dollars are spent in the South, but other industries, such as manufacturing and agriculture, carry the economy down there. Here tourism, of course, is the major factor—or one of the major factors.

The employment mix demonstrated in exhibit C, which I have also attached, further illustrates this situation. Statewide tourism employment is 8.9 percent of total employment. But in most of northwest Wisconsin, tourism employment is much higher. In Bayfield County, it is almost 31 percent; in Douglas, 15.15 percent, and so forth.

The conclusion can be drawn, and should be drawn, that tourism is a dominant factor in the economy of this region. Because of the lack of other industries to carry the economy, special attention needs to be given to maintaining and developing tourism in the region. To this end, WTF feels that there are certain priority issues that need special attention from all levels of government.

One, of course, is the environment. Natural resources are what sell tourists on northern Wisconsin—trees and lakes, and so forth—and these must be protected so that visitors and natives alike can enjoy clean air, water, and untainted fish.

I couldn't help but notice—I'll share this with you—coming up on the plane this morning, an article in the Wisconsin State Journal which has also been in the other major papers in southern Wisconsin for the last several days, and that concerns the quality of the fish in Lake Michigan with several Government agencies warning people to be wary of eating the sport fish that they catch in the lake. This kind of thing will probably have a major impact on sport fishing in that part of the State, and I think at all costs, Government needs to move to clean things up and protect that situation from occurring here because the impact will be devastating over time on the economy.

Accessibility: I think, is also a problem. This region is either far from major tourist markets—Milwaukee or Chicago—or has to compete with areas just as close to major markets, such as Minneapolis, which is nearer to this area and mentioned as a primary source of tourists. But Minnesota also has a thriving tourist business of its own. Therefore, steps should be taken, I think, to complete the Wisconsin interstate system in northern Wisconsin and generally upgrade and keep in high quality all highways in this part of the State.

I think we also need to increase State promotional funds to compete with surrounding States which spend much more money to attract tourists. Wisconsin spends about $2 million a year of the State budget promoting tourism, versus Illinois at $4.5 million, Minnesota at $3.9 million, Michigan at $6.9 million, and so forth.

Wisconsin's success in tourism has really been in spite of—rather than due to—its promotional efforts. We are blessed with an outstanding location between two major metropolitan areas, Chicago and the Twin Cities, and with an abundance of natural beauty, a rich ethnic and historical heritage, and the major city of Milwaukee, which does provide one of the best tourist values in the Nation.

In addition, Wisconsin has a nationwide reputation for friendliness, good service, fine dining, excellent and reasonably priced accommodations, and cleanliness, both in the environment and government. In other words, our location and reputation have sold us to those in a position to know about us or somehow find out about us, but I hesitate to hazard a guess as to what tourism could accomplish statewide or in northern Wisconsin if it was properly promoted. And that's one of the major problems.

We also need to increase, I think, the role of various governmental agencies in the spending of tourist dollars, and particularly we are recommending at the State level to increasing the Governor's council on tourism from advisory to board status, with policymaking authority.

We also need, at the State level, to work for inherent risk legislation for recreational activities. Liability insurance for many tourism businesses has become prohibitively expensive or impossible to obtain, and this is particularly true for ski-hill operators, riding stables, and facilities where water skiing is available.

We have another problem, and that is that we need to get some kind of legislation passed that mandates that schools at all levels in Wisconsin begin classes after Labor Day. This item is crucial to all Wisconsin, but is particularly crucial to this region that depends so heavily on tourism. The recent trend toward starting schools as early as mid-August has reduced the prime tourist season by as much as 20 percent, and in addition to inconveniencing thousands of families who would like to take their vacations at this time, it also results in the loss of many jobs in tourism industries. Therefore tax revenues are also lost at the local, State, and Federal levels.

The Wisconsin Tourism Federation believes that attention to these items will immeasurably improve the tourism business climate in Wisconsin and enable tourism to move toward its great potential in this region and in the United States.

Thank you very much.

Senator KASTEN. Thank you.

[The prepared statement of Mr. Lump follows:]

WISCONSIN TOURISM FEDERATION
The Federation of Wisconsin Hospitality/Tourism/Recreation Groups
c/o Wisconsin Restaurant Association
122 W. Washington Ave.
Madison, WI 53703
(608) 251-3663

August 28, 1984

TO: U.S. Senate Small Business Committee, Sen. Robert Kasten, Chair

FROM: Edward J. Lump, President

RE: Field hearing on the importance of environmental quality of the Great Lakes to the economy of the region, with special emphasis on tourism.

I am the Executive Vice President of the Wisconsin Restaurant Association, which has approximately 5,000 member units statewide. WRA and the restaurant industry are a major part of tourism, and of course, are major supporters of tourism through the Wisconsin Tourism Federation.

I am here today as President of the Wisconsin Tourism Federation, and I'd like to begin by telling you about this organization.

We are primarily a political coalition of member organizatiosn that are heavily involved in tourism. WTF was formed to disseminate information about political issues involving our individual groups and the entire tourism industry, and to lobby for tourism issues of common interest. Members organizations include:

Wisconsin Restaurant Association
Retail Gasoline Dealers of Wisconsin
Central Madison Council
Wisconsin Recreation Industries
Geneva Lakes Chamber of Commerce
Wisconsin Northwoods Council
Wisconsin Innkeepers Association
Wisconsin Indianhead Country
Central Wisconsin River Country
Hidden Valleys
Southern Gateway
Wisconsin Association of Convention and Visitors bureaus
Fond du Lac Convention and Visitors Bureau
Wisconsin Motorcycle Dealers Association
Wisconsin Bakers Association
Wisconsin Outdoor Advertising Association
G. Heileman Brewing Co.
Wisconsin Association of Campground Owners
Wisconsin Dells Regional Chamber of Commerce
Wisconsin Association of Manufacturers and Commerce

When it comes to working to successfully entice tourists to Wisconsin, WTF is probably the most important organization in the state.

Whether we are trying to entice local people to stay in Wisconsin or lure tourists from adjoining states, the rest of the nation or the rest of the world -- tourism promotion needs proper funding and a congenial economic climate. WTF is virtually the only non-governmental organization in Wisconsin working for that funding and climate.

Having looked at this background information, let's turn to the importance of tourism to this region of Wisconsin and the special factors that come into play for this area.

In terms of sales impact of hospitality, recreation and tourism on the local economy, 11 of the top 24 tourism impact counties in Wisconsin are in the northern part of the state (see Exhibit A). They are, with their rankings: 1st - Vilas; 6th - Sawyer; 8th - Ashland; 9th - Florence; 10th - Iron; 11th - Langlade; 12th - Oneida; 14th - Bayfield; 15th - Burnett; 19th - Washburn; and 24th - Douglas. Of course, of these 11, seven are in northwestern Wisconsin.

It is interesting to note that, with the exception of Douglas County (ranking 23rd), none of these counties ranks in the top 24 for tourist spending (see Exhibit B). The situation is that tourism is of far greater economic importance to the northern part of the state than the southern. More tourism dollars are spent in the south, but other industries, such as manufacturing and agriculture, carry the economy.

The employment mix demonstrated in Exhibit C further illustrates this problem. Statewide tourism employment is 8.91% of total employment. In most of northwest Wisconsin, tourism employment is much higher: in Bayfield County, for example, it is 30.9% and in Douglas County, 15.5%.

The conclusion can be drawn that tourism is a dominant factor in the economy of this region, and because of the lack of other industries to carry the economy, special attention must be given to maintaining and developing tourism in the region.

To this end, WTF feels that certain priority issues need special attention from all levels of government:

1. Environment: Natural resources are what sell tourists on northern Wisconsin -- trees and lakes. These must be protected so that visitors and natives alike can continue to enjoy clean air, water and untainted fish.

2. Accessibility: This region is either far from major tourist markets (Milwaukee and Chicago), or has to compete with similar areas just as close to major markets (Minneapolis is a nearer major market area, but Minnesota has similar areas of its own). Therefore, steps should be taken to complete the Wisconsin interstate system to northern Wisconsin, and to generally upgrade all highways in the area.

3. Increase state of Wisconsin promotional funds to compete with surrounding states which spend much more money to attract tourists. For example, here's how Wisconsin compares to its neighbors in tourism promotion spending for 1983-84: Illinois - $4.5 million, Minnesota - $3.9 million, Michigan - $6.9 million, and Wisconsin - $2 million.

Wisconsin's success in tourism has been in spite of, rather than due to, its promotional efforts. We are blessed with an outstanding location between two major metropolitan areas (Chicago and the Twin Cities), and with an abundance of natural beauty, a rich ethnic and historical heritage, and the major city of Milwaukee which provides one of the best tourist values in the nation.

In addition, Wisconsin has a nationwide reputation for friendliness, good service, fine dining, excellent and reasonably-priced accommodations, and cleanliness both in environment and government. In other words, our location and reputation have sold us to those who are in a position to know us or somehow find out about us. I hesitate to hazard a guess about what tourism could accomplish statewide or in northern Wisconsin if we promoted properly.
Senate Small Business Committee

4. Increase the role of the Governor's Council on Tourism from advisory to "board" status, with policy-making authority in some budgetary areas, specifically regarding "earmarked" funds. In this area, we would also wish to expand the make-up of the Council to include legislators, governmental agencies such as the Department of Natural Resources, and other groups involved in tourism, such as the Arts Board, Historical Society, etc.

5. Passage of "inherent risk" legislation for recreational activities. Liability insurance for many tourism businesses has become prohibitively expensive or impossible to obtain. This is particularly true for ski-hill operators, riding stables and facilities where water skiing is available.

6. Pass legislation that mandates that schools at all levels in Wisconsin begin classes after Labor Day. This item is crucial to all of Wisconsin, but is particularly critical to this region.

The recent trend toward starting schools as early as mid-August has reduced the prime tourist season by as much as 20%, and in addition to inconveniencing thousands of families who would like to take their vacations at this time, it also results in the loss of many jobs in tourism industries. Therefore, tax revenues are also lost —local, state and federal.

The Wisconsin Tourism Federation believes that attention to these items will immeasurably improve the tourism business climate in Wisconsin, and enable tourism to move further toward its great potential in this region and in the entire state.

EXHIBIT A

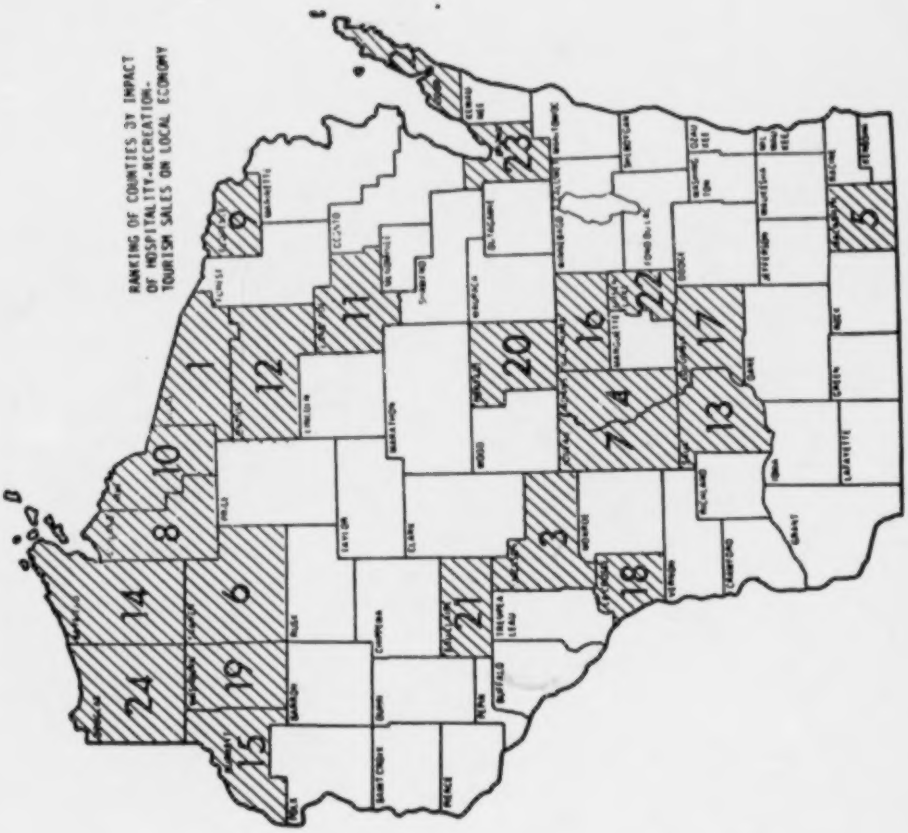
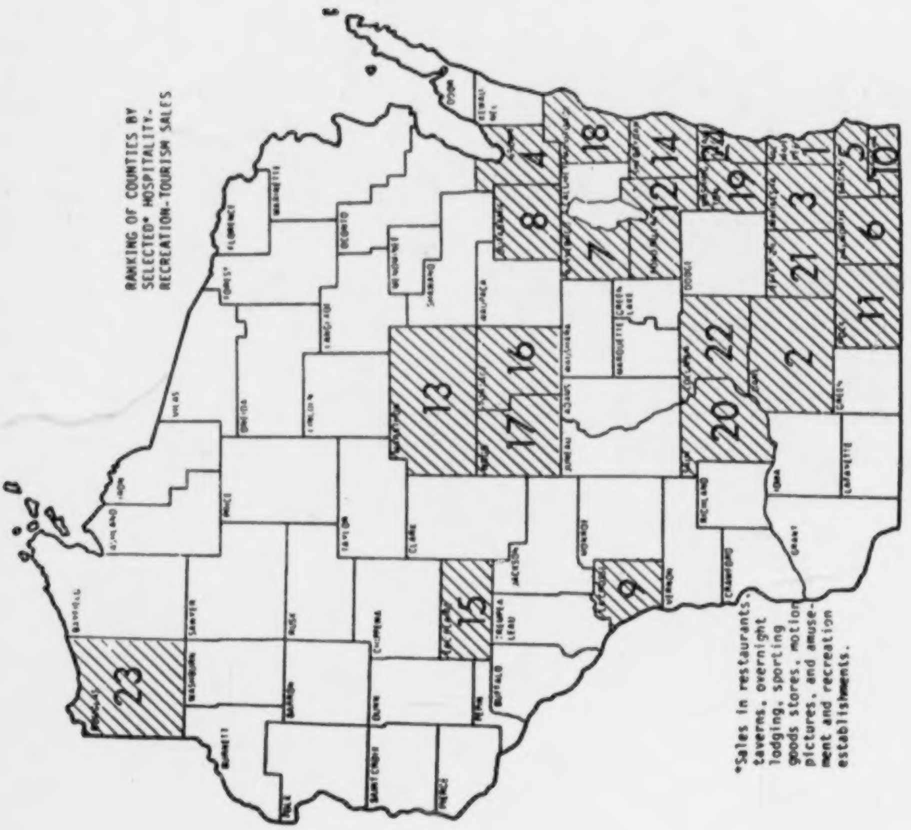

RANKING OF COUNTIES BY IMPACT OF HOSPITALITY-RECREATION-TOURISM SALES ON LOCAL ECONOMY
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

EXHIBIT B



23
15
9
13
17
16
20
22
2
11
21
6
3
1
5
10
19
24
12
14
7
8
4
18

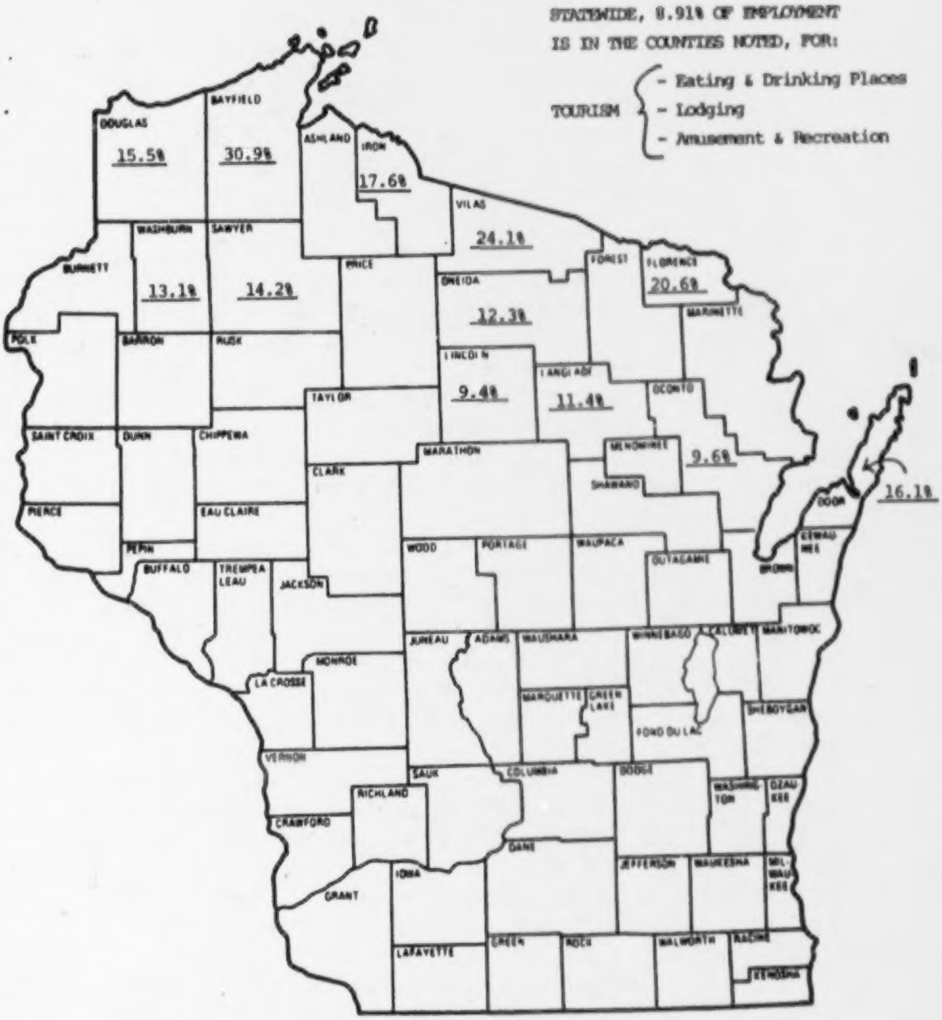
RANKING OF COUNTIES BY SELECTED* HOSPITALITY-RECREATION-TOURISM SALES

*Sales in restaurants, taverns, overnight lodging, sporting goods stores, motion pictures, and amusement and recreation establishments.

EXHIBIT C

STATEWIDE, 8.91% OF EMPLOYMENT
IS IN THE COUNTIES NOTED, FOR:

TOURISM
- Eating & Drinking Places
- Lodging
- Amusement & Recreation


DOUGLAS
15.5%
BAYFIELD
30.9%
ASHLAND
IRON
17.6%
VILAS
24.1%
WASHBURN
13.1%
SAWYER
14.2%
BURNETT
PRICE
ONEIDA
12.3%
FOREST
FLORENCE
20.6%
MARINETTE
POLK
BARRON
RUSK
LINCOLN
9.4%
LANGLADE
11.4%
OCONTO
9.6%
TAYLOR
SAINT CROIX
DUNN
CHIPPEWA
MENOMINEE
SHAWANO
DOOR
16.1%
MARATHON
CLARK
PIERCE
EAU CLAIRE
PEPIN
KEWAUNEE
WOOD
PORTAGE
WAUPACA
OUTAGAMIE
BROWN
BUFFALO
TREMPEALEAU
JACKSON
JUNEAU
ADAMS
WAUSHARA
WINNEBAGO
CALUMET
MANITOWOC
MONROE
LA CROSSE
MARQUETTE
GREEN LAKE
FOND DU LAC
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
WASHINGTON
OZAUKEE
RICHLAND
CRAWFORD
DANE
JEFFERSON
WAUKESHA
MILWAUKEE
IOWA
GRANT
LAFAYETTE
GREEN
ROCK
WALWORTH
RACINE
KENOSHA

Senator **Kasten**. Obviously, we're not experts on setting the schedule for schools, but I've never understood why that kind of trend, that shift, has been going on. Obviously it's not a Federal problem; it's a State problem, and it would seem to me that those are the kinds of things that could be best decided by the local people, the school boards in the regular areas. But I simply don't understand why they have tended to start school so early. It would be my hope—I think you're exactly right; maybe the only alternative is a State law, but it seems to me that that's not the kind of thing that the Federal—and hopefully not the State—Government ought to get itself involved in. We believe in local control of schools.

Mr. **Lump**. Well, we understood it wasn't the subject, but we also felt that because it has such a substantial impact in this area, that the comment ought to have been made. We have tried, I think, as individual members, businesses involved locally in tourism, or as the Tourism Federation, to get local areas to change their calendars. Our success has been very, very minimal over the years. Most of the school boards have decided that they're going to set the calendar for their own convenience and not really pay a lot of attention to the economic impact, and that's why we were looking at the State for a solution.

Senator **Kasten**. Bruce, going back on Barkers Island, which I think is a perfect example of a combination of taking the environment into consideration as well as developing businesses, can you just describe what the actual development of that did involve, if I remember correctly, one or more Federal Government grants; isn't that right? Wasn't there a UDAG or something that was involved in that process? I wonder if you could just take us through the steps of that a little bit.

Mr. **Hagen**. OK. The steps occurred over approximately 5 years. The island is a manmade island, and we felt that it would be an ideal tourist attraction as well as a focal point for the community.

Quickly, the Federal grant which you referred to is through the Economic Development Administration. It was a grant in the amount of, I believe, $3.9 million. Also, in addition to that, there was "304" money from the Governor's office in the amount of $400,000. The initial grant was $50,000 for a study, and then along with that $3.9 million and $400,000, the city of Superior put in $2.5 million of general obligation money. So approximately $6.8 million or $7 million was spent to create the marina. In addition to that, the hotel—the Radisson Hotel—is owned by a local individual, but it's managed by the Radisson Hotel Corp., and we received a $750,000 UDAG grant to put toward that development. So it is a total private, government, public, local, State and Federal Government project.

Senator **Kasten**. So what you're saying, Lee, is that you want more of these kinds of dollars available for tourism; and the problem as you see it, and the people that you're representing see it, is that those dollars aren't available in terms of smaller businesses or smaller projects. Is that a way that I can best understand what you're——

Ms. **Jensen**. Yes.

Senator **Kasten**. In the Congress we always have trouble getting people to speak for less than 5 minutes, but I think I've found a system. We've got this button on the microphone, and your thumb gets tired, and all of a sudden people start limiting their comments. [Laughter.]

Ms. **Jensen**. I think primarily that most of the businesses, as Under Secretary Tuttle referred to, in Wisconsin are small businesses. When we refer to small business here, we are oftentimes thinking of the sole proprietor or the individual that has 5 to 10 employees. In this case it might be smaller resort owners in the southern part of Douglas County or small business people that want to put a retail development in close proximity to the Barkers Island development because of the traffic that that has generated for the community.

Senator **Kasten**. Bruce, I'd like for you just to develop a thought a little bit. You suggested that, at least in this area, in Superior, development of business opportunities in terms of tourism might in fact lead or be first, and then you would be able to come along with smaller and more traditional small businesses, machine tool shops, whatever. Do you have any evidence that that has started yet?

Mr. **Hagen**. OK. If you take U.S. Highways 2 and 53, which parallel the island, you will note that several businesses have begun since the inception of the island, or the project, if you will. Perkins Restaurant—there are about 60 people working there. We relocated a marine shop down there. We're looking at another marine shop further south or southeast. We're looking at what we call Colonial Hill. These are all tourist service industries. A new MacDonald's, which will have about 65 part-time, full-time employees. These types of industries—I'm dealing with an industry out of Twin Cities right now who basically came to us out of the fact that he docks his boat at the island. It's a small industry, machine-type industry, and he's looking to hopefully move that industry to Superior because he likes it here and he isn't that concerned—or I should say interested—with regard to the Minneapolis congested atmosphere.

There are several other businesses that we have been working with. Hopefully we will attract all or most of them out of the Twin Cities area, basically because they found out about us. Because of the island, they've put their boats here; they've been told about it from others that have visited us also.

So these types of things have occurred. There are other small businesses that we're working with in the marine world, if you will, that have been an outcrop of the experience through this facility.

Senator **Kasten**. Thank you.

I'd like to thank the three members of this panel. There may be questions—and I should have said this to the previous group, as well—that members of the committee may wish to submit to you for response in writing after we've had an opportunity to review more fully your testimony and, frankly, I've had an opportunity to review some of this testimony with some of my colleagues who are members of this committee who are unable to be here today. So we may come back to you with questions and ask you to respond to us in writing.

But I would like to thank you very much for your testimony, and ask now for the next panel, Mr. Culley, Mr. Miller, and Mr. Brown, to come forward.

I was just handed a note by one of the staff of the Small Business Committee who is with us today, and he pointed out that for fiscal year 1985, under the SBA Guaranteed Loan Program, the Small Business Administration Guaranteed Loan Program, the Congress has appointed—and we had a little bit to do with this—$2.65 billion for loans to assist small businesses that can't get loans on their own credit from banks. So these loans certainly would include tourism and tourism-related industries. So I think that the Congress is reacting and responding to some of the kinds of pressure that, particularly, Lee was talking about in the last panel when she talked about the various smaller kinds of businesses. We have appropriated for next year $2.65 billion for these kinds of assistance.

Our first speaker on the tourism and recreation industry panel is Mr. Jack Culley, who is the president of Sailboats, Inc., Superior, WI. Jack, it's a pleasure to have you with us.

STATEMENT OF JACK R. CULLEY, PRESIDENT, SAILBOATS, INC., SUPERIOR, WI

Mr. CULLEY. Senator Kasten, ladies and gentlemen, I am pleased to have this opportunity of making this statement to your committee.

Sailboats, Inc. is a small business in its 14th year, with headquarters in Superior at the Barkers Island Marina. We have revenues of about $3.5 million, 65 employees during the boating season, and 25 during the balance of the year. The sales offices are in Minneapolis and Chicago.

We have operated Barkers Island Marina since it was opened in 1980 under contract with the city of Superior. The development, spearheaded by Mayor Hagen as a new focal point for Superior has, we believe, been successful in achieving this objective. The Radisson opened in 1982. The marina has had a steady growth in utilization since opening and is, today, near capacity.

Under a contract similar to that we have with Superior, we opened the Manitowoc Marina this spring. The development, while smaller, is similar. A hotel is being built which will open before next spring adjacent to the marina.

We began chartering sailboats in Bayfield in 1976. Today we have 57 boats in charter at Bayfield, 20 at Superior, 17 in Marinette, 2 at Manitowoc, and 5 at Sarasota, FL.

The tourism potential resulting from the charter of sailboats from Wisconsin ports is no less exciting than the growth of skiing in Colorado. Already there is more sailboat chartering in western Lake Superior than any other boating area in North America. In addition to our 77 boats, there are another 100 in other charter operations in the Bayfield area. Thanks to the beauty of the area, and the Great Lakes of Superior and Michigan, Wisconsin has every other State beat when it comes to summer sailing. We simply need to promote it more effectively.

"Sail Wisconsin," we believe, can be as successful as "Ski Colorado."

The health of the Great Lakes, of course, is crucial to the future of this program, as well as many others.

The capacity of Wisconsin ports to support increased boating activity is there. Additional capacity will become available as it is needed. Regional airline service will, we believe, become available to meet the demand.

Supporting our objectives, which may seem optimistic, is our experience during the past 9 years of chartering and 5 years of instruction. Every year has exceeded the previous year's charter volume. We have graduated 1,000 bareboat charter students; this year's 360 was 35 percent over last year. They, of course, have become charter customers.

Our fleet of privately owned sailboats is representative of over $6.5 million investment.

Wisconsin sailing, and its advantages, is being "discovered." The continued growth will be geometric as more and more people become aware and capable of chartering.

This is an appropriate place in this statement to quote William F. Buckley, Jr. on "the rewards of adventure travel":

> There is a growing appetite among many Americans for active vacations that teach them a new outdoor skill or provide them a new outdoor skill or provide a close encounter with nature. An adventure trip gives you the feeling that you are in charge of your life, and not simply a pawn of nature.

Added to this is the 1980 Gallup poll, which I have attached as an exhibit, which reports 49 percent of the population interested in sailing, with only 4 percent having been sailing. The comparison with skiing, 6 percent, is interested, as well as with tennis, 14 percent. How many people would play tennis if they had to buy the court?

Both Barkers Island Marina and Manitowoc offer excellent fishing. From a tourism standpoint, however, our experience is that it is less important than charter sailing. The main difference is that the distances people will travel and the time they will spend on a sailing charter is sharply greater than for that for a fishing charter. Further, sailing uniquely fulfills the "adventure" objective better than any other water-related activity.

Our business plan is to continue our promotional efforts, which have produced the results for our business to date. The growth of this tourism market will be dependent upon broader recognition of what is happening and how Wisconsin can accelerate the growth. Our Great Lakes natural resources are exceptional; they simply need exposure and promotion with an associated activity of interest to large numbers of people. Sail Wisconsin.

Thank you.

Senator KASTEN. Jack, thank you very much.

[The prepared statement of Mr. Culley follows:]

STATEMENT BY
JACK R. CULLEY, PRESIDENT, SAILBOATS, INC.
BEFORE SUBCOMMITTEE ON AUGUST 28, 1984
SENATE SMALL BUSINESS COMMITTEE

Senator Kasten, Ladies and Gentlemen:

I am pleased to have the opportunity of making this statement to your committee.

Sailboats, Inc. is a small business, in its' fourteenth year, with headquarters in Superior at the Barker's Island Marina. Revenues of about $3.5 million, 65 employees during boating season and 25 during balance of year. Sales offices in Minneapolis and Chicago.

We have operated Barker's Island Marina since it was opened in 1980 under contract with the City of Superior. The developement, spearheaded by Mayor Hagen as a new focal point for Superior has, we believe, been successful in achieving this objective. The Radisson opened in 1982. The marina has had a steady growth in utilization since opening and is, today, near capacity.

Under a contract similar to that we have with Superior we opened the Manitowoc Marina this spring. The development, while smaller, is similar. A hotel is being built which will open before next spring adjacent to the marina.

We began chartering sailboats in Bayfield in 1976. Today we have 57 boats in charter at Bayfield, 20 at Superior, 17 in Marinette, 2 in Manitowoc and 5 in Sarasota, FL.

The tourism potenital resulting from the charter of sailboats from Wisconsin ports is no less exciting than the growth of skiing in Colorado. Already there is more sailboat chartering in Western Lake Superior than any other boating area in North America. In addition to our 77 boats there are another 100 in other charter operations in the Bayfield area. Thanks to the beauty of the area, and the Great Lakes of Superior and Michigan, Wisconsin has every other state beat when it comes to summer sailing! We simply need to promote it more effectively.....

SAIL WISCONSIN, we believe, can be as successful as SKI COLORADO!

The health of the Great Lakes is, of course, crucial to the future of this program as well as many others.

The capacity of Wisconsin ports to support increasing boating activity is there...additional capacity will become avaialable as it is needed. Regional airline service will, we believe, become avaiable to meet the demand.

Supporting our objectives, which may seem optomistic, is our experience during the past nine years of chartering and five years of instruction.

# Every year has exceeded the previous year's charter volume.

# We have graduated 1,000 Bareboat Charter Students...this year's 360 was 35% over last year. They, of course, become charter customers.

# Our fleet of privately owned sailboats is representative of over $6.5 million investment.

Wisconsin sailing...and its' advantatges...is being "discovered". The continued growth will be geometric as more and more people become aware and capable of chartering.

This is an appropriate place in this statment to quote William F. Buckley, Jr. on "The rewards of adventure travel".....

"There is a growing appetite among many Americans for active vacations that teach them a new outdoor skill or provide a close encounter with nature."

"An adventure trip gives you the feeling YOU are in charge of your life and not simply a pawn of nature."

Added to this is the 1980 Gallup Poll, attached exhibit, which reports 49% of population interested in sailing...with only 4% having been sailing! The comparison with skiing (6%) is interesting...as well as with tennis (14%). How many people would play tennis if they had to buy the court?

Both Barker's Island Marina and Manitowoc offer excellent fishing. From a tourism standpoint, however, our experience is that it is less important than charter sailing. The main difference is that the distances people will travel and the time they will spend on a sailing charter is sharply greater than for a fishing charter. Further, sailing uniquely fulfills the "adventure" objective better than any other water related activity.

Our business plan is to continue our promotional efforts which have produced the results for our business to date. The growth of this tourism market will be dependent upon broader recognition of what is happening and how Wisconsin can accelerate the growth. Our Great Lakes natural resources are exceptional...they simply need exposure and promotion with an associated activity of interest to large numbers of people...SAIL WISCONSIN!

Attached exhibits:

1. 1980 Gallup Poll Survey of Leisure Activities.

2. October 1982 YACHTING reprint of CRUISING SCHOOL.

3. 1984 Sailboats Inc. Charter Fleet Booklet, A SAILING VACATION CAN BE YOURS.

RESULTS OF GALLUP POLL BASED UPON INTERVIEWS CONDUCTED APRIL 11, 1980

To determine the level of participation in various sports and outdoor activities, Americans were asked to indicate which activities they had participated in, one or more times, within the last 12 months. Here are the national results:

Swimming	37%
Bicycling	27
Bowling	24
Fishing	24
Hiking	21
Camping	19
Basketball	18
Frisbee	17
Softball	16
Tennis	14
Volleyball	13
Hunting	13
Roller Skating	12
Motorboating	12
Touch Football	11
Baseball	10
Motorcycling	10
Golf	8
Water Skiing	7%
Canoeing & Rowing	7
Ice Skating	7
Horseback Riding	7
Racquetball	6
Snow Skiing	6
Back Packing	5
Table Tennis	4
Handball	4
SAILING	4
Soccer	4
Snowmobiling	3
Archery	3
Snorkeling	2
Distance Running	2
Surfing	2
Scuba Diving	1
Squash	1

The following are selected 20 year trends in sports participation:

	1980	1972	1964	1959
Bicycling	27%	28%	20%	-%
Bowling	24	28	31	18
Fishing	24	24	38	32
Tennis	14	12	10	4
Roller Skating	12	5	8	4
Motorboating	12	20	6	-
Hunting	13	14	16	1
Golf	8	5	4	3
Skiing	6	5	4	3

"Now, which of these sports or activities would you, yourself like to take up - or participate in - more often?"

Here are the top choices nationwide:

Scuba Diving	56%
SAILING	49
Deep Sea Fishing	48
Snorkeling	46
Hunting	39
Horseback Riding	38
Back Packing	37
Golf	37
Tennis	36
Camping	33

REPRINTED FROM Yachting®
October 1982

Cruising School

Sailboats Inc.'s classes learn proper boathandling technique

By STUART JAMES

"There's more to sailing than pulling on a rope," says Jack Culley with characteristic candor. "Anchoring properly is more important than perfect sail trim." He is smiling slightly, but he's not kidding. "Anybody can round a buoy," he says. "Being able to maneuver a good-sized yacht around a concrete dock in a foul wind is more important." He has a likeable manner; an attractive man in his late forties, trim, soft-spoken, efficient and sure of himself. "We don't teach sailing," he adds, "we teach cruising."

Jack Culley is the president of Sailboats, Inc. With offices in Minneapolis, Superior and Bayfield, Wis., he oversees his sailing school, a charter fleet of 90 sailboats and a dealership that he claims sells more C&C sailing yachts than any other in the midwest. He also runs the new multimillion-dollar municipal marina at Barker's Island on contract with the city of Superior.

It was the sailing school that interested us and we found early on that Jack Culley has his own ideas about selling boats and teaching sailing. Twenty years in sales and marketing with the Pillsbury Corp. have left their mark. Culley is a merchandiser and he is packaging sailing. He cites a Gallup poll that shows that only 4 percent of adult Americans participate in sailing while 49 percent rate it an activity they would like to try.

"A lot of potential sailors are turned away because they have been led to believe that sailing is difficult," he says. "And more are turned away by an experience in a small, tippy daysailer before they even get a chance to learn anything or enjoy it. We eliminate the fear and mystique of sailing just by using a stable keel boat that doesn't tip over, the kind of boat they will want to charter or own. It's practical and it's pleasant."

His philosophy is simple. Teach a person to sail in a C&C yacht in the Apostle Islands and they will feel comfortable chartering a C&C yacht in the Apostle Islands. In effect, the Apostles are part of his sales package.

We were getting a bird's eye view. The aircraft, piloted by Jack Culley, banked to the left and began a lazy, spiraling circle of Madeline Island. We could see all of the Apostle Islands, odd-shaped pieces of green foliage rising out of the slate-gray water of Lake Superior.

This is the most popular sailboat cruising area in northern Wisconsin: 20 uninhabited islands spread over 500 square miles in the southwestern corner of Lake Superior. Made a part of the National Park Service in 1970, the islands are a waterbound paradise for the yachtsman, camper and hiker.

"Madeline is not part of the National Lakeshore," Culley says. "It's the only island still inhabited." He swoops low for a look at the lakefront homes, bits of white showing through the green that forms a necklace of private dwellings which embrace the island.

"That's Bayfield there," Culley said, maneuvering into an S-turn to bring the mainland village, just two miles from Madeline Island, into view. "Down there, that little red building, that's our office."

Bayfield, Wis., has been a fishing village for a hundred years. The barn-shaped gill-net boats still harbor here, but the main business is tourism now and craft shops and art galleries shoulder up against knick-knack shops that nudge the restaurants and bars. The finger piers of the town marina are filled with pleasure boats, mostly sail.

It is the end of May. Still cold out here on the edge of Canada. It is early morning. The lake water is smooth; a gossamer of mist swirls and drifts like winter breath.

"Will this fog burn off?" we ask a weathered local resident standing at the edge of the breakwater.

"T'aint fog," he says, hunching into the collar of his jacket and pushing knobby work hands into the pockets of his baggy khaki pants. "We call it lake effect."

Back at the Pier Plaza restaurant we met Dick Caswell sharing coffee with two instructors. Caswell is director of the sailing school, an avid disciple of Jack Culley's teaching methods and a perfectionist. When he couldn't find a sailing textbook that was direct enough and tailored to what they wanted to teach, he sat down and wrote his own. It's called *The Cruising Sailor's Handbook*. He is rigid about what will be taught and every instructor has a checklist to follow, and each student must be rated on each point Caswell believes they must know to charter a boat. The instructor files a written report on every student.

Does Caswell honestly believe that after two or three days of on-the-water instruction a greenhorn sailor is ready to take a 30' sailboat out for a week's cruise?

"Absolutely," he says without a moment's hesitation. "Consider now that these people have already had four classroom sessions before they get near a boat. And the classroom work is thorough." He teaches the classroom sessions himself. "We have never had a student who chartered with us or elsewhere who had a problem."

Okay, we'll buy that for nice weather. But how would they fare in a storm?

"I'll give you an example," he says. "We had 12 boats out on charter when a squall came through. It was a real duster. It was followed by a second squall that was even worse. Two of the charterers were recent graduates. There wasn't a single problem. The new sailors just got behind an island, anchored and weathered it out. We got them on the radio and they weren't the least concerned." He pauses a moment, then says, "Hey, look, we would like to have it blow like stink on the second day so the students could experience it with an instructor on board, but you just can't count on it." He is a true believer and his enthusiasm is contagious. "You'll see," he says.

We will accompany a class aboard a C&C 29. All of the classes this week are on C&C 29s. The school, as a matter of fact, doesn't use anything but C&C yachts, and that's also the only thing they charter. "They're fine boats," says Jack Culley. But isn't it an awfully expensive boat to start a novice in? "A cheap yacht is a contradiction in terms," Culley says matter-of-factly.

John Geisheker is the instructor. He is an engaging sort, a man of many parts: scholar, peripatetic boat bum, school teacher, and a law school graduate who has recently passed the Minnesota Bar exams and has a special dispensation from a law firm that allows him to sail three days a week.

The students are all from the Minneapolis area. Tom Carroll, Rick Lemons and Charles Durkee. A police investigator, an art director and a doctor. Their common denominator is that they have a little sailing experience and want to get into cruising bigger boats.

Geisheker is a natural teacher, and he loves boats. He wants his students to share that affection. He goes over the boat for the first time with them as if it is a charter and they are seeing what goes where. And as he examines storage and cooling and the lockers and anchor storage and sail bags and the head and hanging closets, he explains the operation of everything in a casual way that is never condescending. It is fascinating and fun from the first moment.

We have already been told that we are not to assist or comment or interfere. We're guests. The students will do everything.

Geisheker talks about heads and their problems and how they work. He talks about tables and the diesel engine. When he is done you realize that he has managed to give a technical dissertation on the diesel engine in just three minutes. He talks about the problems of the dinghy painter and how a tangled line can foul a propeller shaft and how to avoid it. "As a charterer you will have to pay for damage," he admonishes. He looks for the batteries, finds them, explains the switching arrangement. But always he zeroes in on an important point: "Never change the battery switch when the engine is running." And explains why. "It can destroy the diodes in the alternator."

Geisheker teaches how to get away from the dock by getting away from the dock, and every detail is touched, from wind direction to the sequence of releasing lines—and always why.

In the selection of sails he talks about wind force and the genoas. The students settle on a 150 genny and in his usual way he mentions that it's called a 150 because it is 50 percent larger than the foretriangle.

On sail trim: "Good enough for cruising, not good enough for racing." But always there is praise. "Fine. Really good. Can you feel the difference? Oh, yes, that's just right." And then an explanation of the physics of sail power. "The trick in reaching is to try and adapt the sails to the wind you've got in such a way as to take all the power out of the wind and get a resultant vector that moves along the path that you wish to travel." Then he makes it simple. "The best way to do that is to trim the sail in just enough so that it scoops up a big chunk of wind, gets the energy from it and moves the boat forward." And then the pragmatic side. "Let the sail out until it luffs, then trim it to the point where there is no luff. You want to keep the vector as far forward as possible." He explains the Bernoulli Effect, but then debunks it. "Our ancestors did this and they couldn't even read. A well-trimmed sail is just on the edge of a luff and no more."

Every item is covered in the same thorough manner, from anchoring to the operation of the alcohol stove and the basics of ranging and plotting a course. "Let's get the weather on the radio," and each student is briefed on radio operation and call procedure. On the return to the dock each student is given a chance to bring the boat into a slip under a variety of conditions.

In two days it is one of the most concentrated courses in cruising the medium-sized yacht we have ever encountered. Even so, there were still some doubts. Did we have an unusually good instructor? Were the students exceptionally receptive? There was still that nagging question: What happens when it all goes wrong?

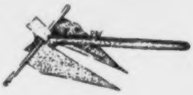
We let a month pass then telephoned two students who had sailed with other instructors. Craig Lewis, a young Minneapolis stock broker, was taking the course with his wife. They loved it. "Gave her tremendous confidence in handling a big boat," he said. They returned to cruise the following weekend. "The first day was nice, a good sailing day. Then it got bad. Rain, storm clouds, the whole works. We got into a sheltered spot and anchored. It got worse and worse through the night, but the anchors held fine and there was no problem. In the morning it was solid fog when we started out, but we plotted a course carefully and took our time and there was nothing to it. I tell you, it's a great course. They do a good job of covering everything."

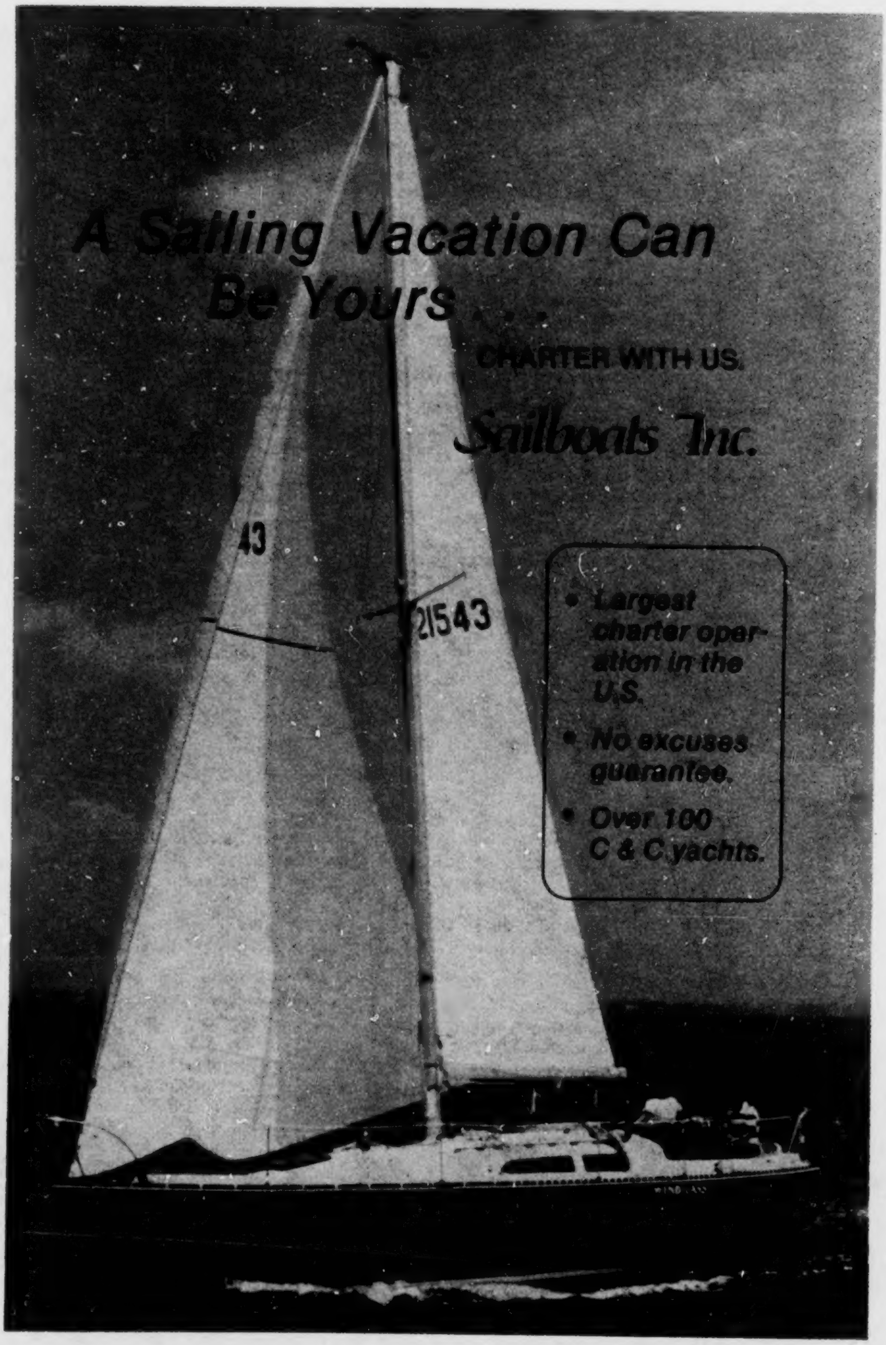
Bob Reminger is also from Minneapolis, a pharmaceutical salesman who took the course with a friend and was planning a charter with his wife. He had sailed only once before. "I enjoyed the course immensely," he said. "The classroom sessions were great, but nothing like on the water. I don't know if I'd want to go off in the ocean, but I feel very confident about sailing in the Apostles."

Is that just what Sailboats Inc. has in mind?

"Yes and no," says Dick Caswell. "We want beginners to charter here on Lake Superior, but it's not just for the business. It gives us a chance to keep an eye on them. Look here." He pulls a file from a cabinet and spreads it on a desk. "Okay, this woman was graded overall as average, and you'll note that she didn't do all that well on weather information, docking or navigation. The instructor recommends that she stay within a 50-mile radius of Bayfield. This is the kind of student we want around for a bit. Every one of our charter boats is equipped with a radio. We can keep in touch with her. Our other boats can keep an eye on her. She can cruise here and not get into trouble. And if she gets into a jam we're right here to help. A season in the Apostles and she'll be able to sail anywhere." ☐

Stuart James is a Contributing Editor of YACHTING.





A Sailing Vacation Can Be Yours . . .

CHARTER WITH US.

Sailboats Inc.

- Largest charter operation in the U.S.
- No excuses guarantee.
- Over 100 C & C yachts.

SAILING VACATIONS . . . A FULFILLMENT OF DREAMS!

Our fleet is late model C&C Yachts. Due to their exceptional performance, C&C's are perfect for cruising and their design and construction quality is, we believe, the finest in the industry.

All of our yachts are privately owned and because the list of equipment is standardized, our experienced staff can assure you of a trouble-free sailing vacation.

Sailing vacations are the fulfillment of dreams . . . but only if the boats and staff perform. Ours do! We have our "No Excuses" guarantee. No other charter firm has this guarantee . . . nobody!

Over 50% of our charter volume is repeat business. We feel this is the best measure of our performance and our customers' satisfaction.

SAIL FROM FOUR LOCATIONS:

Bayfield, Wisconsin – Bayfield is the headquarters of the Apostle Islands National Lakeshore on Lake Superior. The Apostle Islands provide a thousand square miles of protected deep and clear waters. (Your anchor can be seen visually in 15 feet!) Good anchorages abound in the islands, uninhabited except for Madeline. There are few hazards to navigation and it is an excellent place to develop your chartering skills.

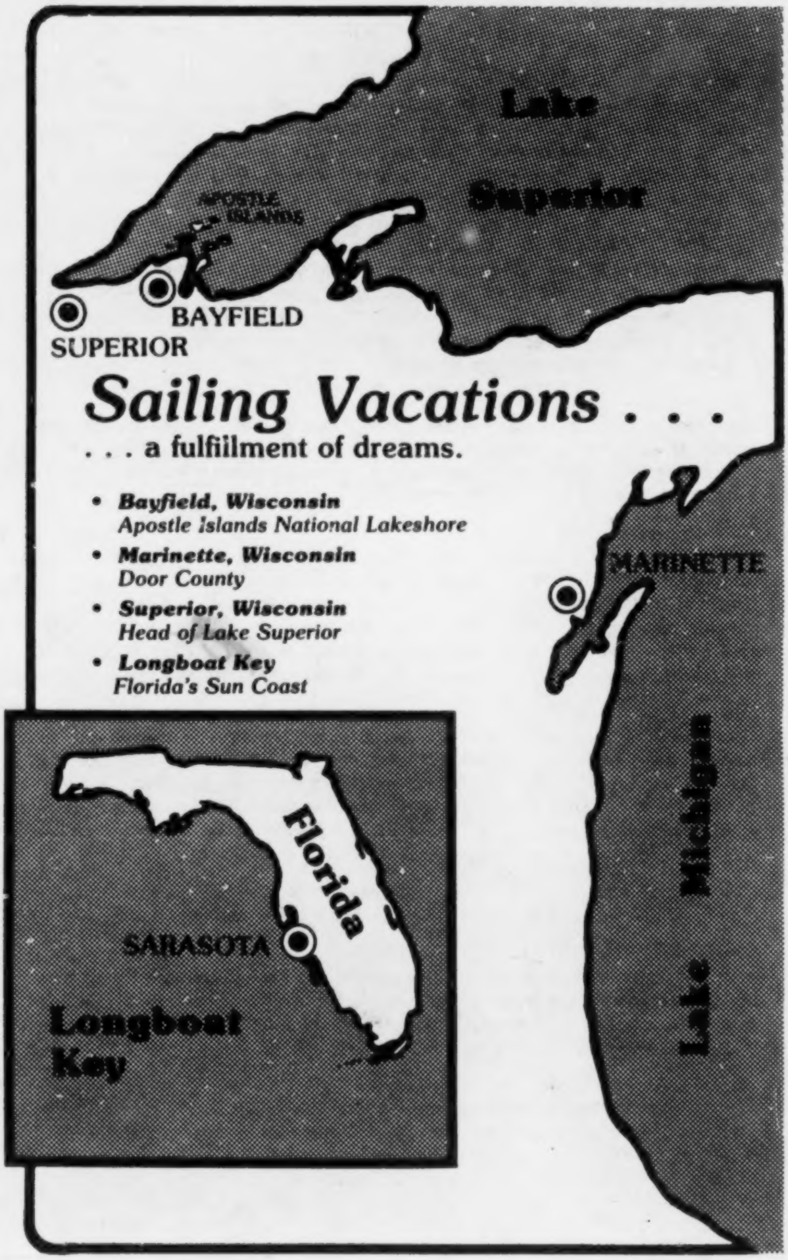
Downtown Bayfield is like a New England village with many fine restaurants, shops, arts and crafts. Isolated from the Twin Cities by 220 miles, Bayfield has retained its character . . . you won't find a single fast food franchise or chain motel.

Superior, Wisconsin – Sailboats, Inc. operates BARKER'S ISLAND MARINA, a $6.5 million, 360 slip marina with exceptional facilities. The newest addition, the Radisson Inn and Yacht Club, 115 rooms, indoor pool, restaurant and bar, convention facilities for 300 . . . This $5.2 million facility, added to the marina, creates an unequalled yachting center.

Superior/Duluth enjoys excellent air, rail and bus service . . . especially convenient for people arriving from outside our immediate area.

Marinette, Wisconsin – Our location on Lake Michigan's Green Bay is only a short sail from the beautiful Door County Peninsula, combining the atmosphere of charming New England fishing villages with the beauty of Norway's fiords. This area is striking for its variety and contrasts. From its rugged shoreline of steep limestone bluffs, plunging cliffs and exploding surfs, to the placid sand beaches edged with dark pine forests, the 250 mile shoreline is a spectacular excursion. A host of unusual shops, galleries and boutiques add excitement to every stroll through each village which dots the peninsula's west side. The new Menominee River Marina at Marinette is simply the finest marina to serve the Door County area.

Longboat Key (Sarasota) Florida – Longboat Key is among the last civilized sanctuaries left from hard sell commercialism in Florida. The Buccaneer Inn and Harbour Club with its four all weather tennis courts, fresh water swimming pool and award winning restaurant provides the optimum location for yacht charters and is, we believe, the most complete yachting resort on the west coast of Florida. The important memories of Longboat Key speak of other things – the sound of waves, bleached white beaches, the clack of palm fronds stirred by gulf breezes and the serenity of an island refuge. Out of the way but easy to reach, Longboat Key offers a relaxed, quiet, secluded atmosphere with many excellent marinas and fine restaurants in the Tampa Bay and Sarasota Bay areas.


Lake Superior
APOSTLE ISLANDS
BAYFIELD
SUPERIOR
MARINETTE
Lake Michigan
Florida
SARASOTA
Longboat Key

Sailing Vacations . . .

. . . a fulfiilment of dreams.

- ***Bayfield, Wisconsin***
  Apostle Islands National Lakeshore
- ***Marinette, Wisconsin***
  Door County
- ***Superior, Wisconsin***
  Head of Lake Superior
- ***Longboat Key***
  Florida's Sun Coast

HOW TO BOOK

The trained staff of our central reservations office in Superior, Wisconsin takes you through the reservations process with cheerful, expert advice that has coordinated thousands of successful charters in more than nine years of operation. Each staff member has firsthand knowledge of our operations so you can be confident that replies to your questions from provisioning, to weather, to clothing, to yacht specifications will be answered quickly and accurately.

1. INFORMATION AND CHARTERING:
   To check on availabilities of charter dates and yachts, call our central reservations office toll free at 1-800-826-7010. If calling from Wisconsin, dial 1-800-472-7133. Office hours are from 9 a.m. to 5 p.m. CT, Monday through Saturday. Our telephone is answered by machine at other times so feel free to call and leave a name and phone number and we would be happy to return the call.

2. TO MAKE A RESERVATION:
   Upon receipt of your request, we will hold your reservation for five days pending receipt of your deposit. Upon receipt of your deposit, a contract and resume of sailing experience form will be sent to you. Deposits may be made using your American Express, Master Charge or Visa card.

3. CONFIRMATION AND DEPOSITS:
   Your reservation will be confirmed in writing upon review and acceptance of your completed sailing resume and charter contract. The balance outstanding (the remaining 50% of the charter fee) together with sales tax, etc., will be paid upon your arrival at the charter location. A damage deposit, at the time of check-in, of 1% of the value of the yacht (approximately $500 for a C&C 27) is required in cash, certified check, Master Charge, Visa, or American Express.

4. MINIMUM CHARTER LENGTH:
   The minimum charter out of Bayfield, Wisconsin and Marinette, Wisconsin is three days from the 4th of July weekend through the Labor Day weekend. There is a five day minimum charter out of Longboat Key from the Christmas holidays through Memorial Day. Half day and one day charters are available out of Bayfield, Wisconsin and Superior, Wisconsin on an "as available" basis only.

5. DEPARTURE DATES:
   Charters may commence any day of the week. You may board your yacht the evening before your charter begins – no need for motel accommodations.

6. CANCELLATION AND CHARGES:
   In the event of cancellation, your deposit will be cheerfully refunded if written notice is received a minimum of 30 days in advance of your charter date. If less than 30 days notice is given, your deposit will be refunded if we are able to obtain a substitute booking.

7. TRAVEL ARRANGEMENTS:
   All four charter fleet locations are readily accessible by air. NORTHWEST AIRLINES offers an excellent tour package for our Florida operations. We have similar tour packages for our Wisconsin locations, as well.
   Call Toll Free (800) 826-7010 or call your Travel Agent.

NORTHWEST ORIENT

CHARTER PRICES – ALL FLEETS
(HIGH SEASON)

Model	2 Days	3 Days	4 Days	5 Days	6 Days	7 Days	Add'l Day Over 7
C&C 24	210	300	375	440	495	540	35
C&C 25	230	330	415	485	535	580	40
C&C 26	240	345	435	510	570	620	40
C&C 27	290	415	520	605	675	730	45
C&C 29	340	480	590	675	750	815	55
C&C 30	370	525	650	750	835	905	60
C&C 32	450	635	780	895	995	1080	75
C&C 34	510	720	890	1025	1135	1230	85
C&C 35 or LF 35	570	810	1005	1165	1295	1405	95
C&C 36	590	840	1045	1210	1345	1460	100
C&C 37	640	910	1130	1310	1460	1585	105
C&C LF 38	670	950	1180	1370	1525	1655	110
C&C 40 - 41	920	1300	1610	1870	2090	2270	150
GB 36	920	1300	1610	1870	2090	2270	150

Instructor/guides available at $100 per day ($60 per ½ day)

$$$ DISCOUNTS $$$

40% Discount on all Sarasota Charters Memorial Day thru December 19

33-1/3% Discount on all Manitowoc, WI Charters ALL SEASON

33-1/3% Discount on all Superior, WI Charters ALL SEASON

20% Discount on Sarasota Charters December 20 through January 31

20% Discount on Bayfield and Marinette Charters before June 30 and after September 6

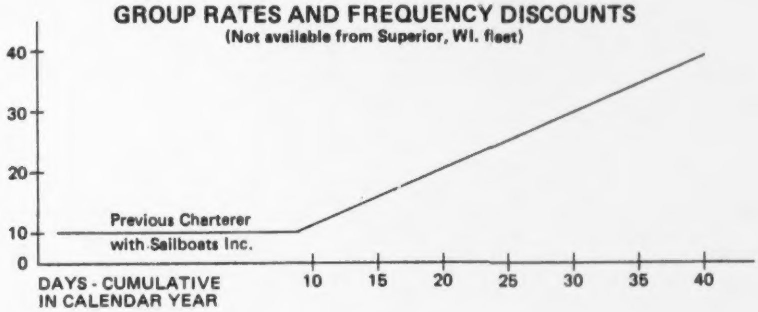
SPECIAL ½ DAY AND 1 DAY RATES AT BAYFIELD AND SUPERIOR:

Model	½ Day	Full Day
C&C 24	$ 70	$110
C&C 25	80	120
C&C 27	100	150
C&C 29	115	170
C&C 30	125	190
C&C 32	150	230
C&C 34/35	170	290
C&C LF 38	200	350
C&C 40	310	475
Grand Banks 36	310	475

SORRY – NO DISCOUNTS OR COURTESY BOARDING ON ½ DAY OR 1 DAY RATES.
CAPTAINED DAY CHARTERS AVAILABLE FROM ALL LOCATIONS.

GROUP RATES AND FREQUENCY DISCOUNTS

(Not available from Superior, WI. fleet)



BAYFIELD, WISCONSIN FLEET

Yacht Name	Model	Berths	Year	Location	Optional Equipment
NAUTILASS	C&C 24	4	77	B	T/O/R/D/B/M/W/AC
SONGBIRD	C&C 24	4	80	B	T/O/AE
AGASSIZ	C&C 25	4	82	B	T/R/D/B/AC/L/WI
BIG BIRD	C&C 25	4	74	B	T/O/D/B/DO
BORN TO RUN	C&C 25	4	80	B	T/D
CALIFORNIA CONNECTION	C&C 25	4	81	B	T/D
VAKKER MACHEN	C&C 25	4	77	S	T/D/B/C/R/L
EPHYDRIAD	C&C 26	5	79	S	D/R/M/B/AC
CABERNET	C&C 26	5	79	S	AC/E/B/D/M/R
ANEMONE	C&C 27	5	78	B	D/WI/AC/M/B
BLUE EAGLE	C&C 27	5	76	B	D/WI/AC
CORINTHIAN	C&C 27	5	75	B	D/DO/H/M/WI/B
DUEN III	C&C 27	5	81	S	D/M/B/AC
FORTNIGHT	C&C 27	5	77	S	B/D/M/DO
PASSAGES	C&C 27	5	82	B	D/AC/M/B
SAWBILL	C&C 27	5	81	S	D/B
TUESDAY'S CHILD	C&C 27	5	77	B	D/WI/DO/H/B/A
TRANSFORMER	C&C 27	5	78	S	D/R/W
PLEASANT INTERLUDE	C&C 27	5	74	B	D/M
CHRISTINE	C&C 29	6	83	B	D/RF/G/AC/B/BD
FRESH AIR	C&C 29	5	77	B	AC/D/WI/M
PASHA II	C&C 29	5	77	B	D/WI/A
SCANDIA	C&C 29	5	79	B	WI/D/AC
SUZANNE R	C&C 29	5	79	B	D/WI/A/M/R/B
ARIELLE	C&C 30	5	81	B	B/D/M/P
ESCAPAR	C&C 30	5	79	B	D/H/DO/B/A/R/M
EIGHTY-FIVE DELTA	C&C 30	5	81	B	B/D/P
GIORSAL	C&C 30	5	80	S	A/D/H/L/M/R/B/SS
IMPOSSIBLE DREAM	C&C 30	5	80	S	AC/D/L/P/H/B/M
INSATIABLE	C&C 30	6	74	B	T/WI/D/AC
JACQUELINE	C&C 30	6	74	B	AC/B/H/WI/M/R/D
MON AMIE	C&C 30	5	82	B	D/P/S/B/H/AC
VERACITY	C&C 30	5	83	B	D/P/S/BD/R/M
ROU THEEOW	C&C 30	5	79	S	AC/B/H/D/WI/R
SYNERGISM	C&C 30	5	80	B	AC/B/R/H/WI/D
ARCTURUS	C&C 32	6	80	B	D/DO/C/R/H/L/WI/B/M/G
FABRICATION	C&C 32	6	80	B	D/R/H/M
FRIENDLY PERSUASION	C&C 32	6	80	B	D/R/WI/DO/AC/B
O'SUSANNA	C&C 32	6	80	B	D/DO/H/R/BD/B
ZOOKEEPER	C&C 32	6	84	B	D/B/P/S/BD/H
APPLAUSE	C&C 34	6	81	B	D/C/M/H/P/S/WI/B
ARRIBA	C&C 34	6	79	B	D/AC/M/R/WI/B/H/L
MOSHULU	C&C 34	6	80	B	D/DO/WI/H/R/B
PEREGRINE	C&C 34	6	78	B	AC/D/H/WI/M/R/L
TIME N TIDE III	C&C 34	6	80	B	D/B/AC/P/M/BD
LOTHARIO	C&C LF 35	4	81	S	B/D/H/SS/S/M/R/WI/L/P/DO/AC/REF
JULE-NISSEN	C&C 35	6	84	B	P/S/B/D/RF/DO/M/AC/R
NARINA	C&C 35	6	83	B	D/WI/BD/P/S/AC/B/L/M
WINDFALL	C&C 36	6	82	S	DO/S/WI/D/P/B/AC/M/H
ASSURED	C&C 37	6	82	B	M/D/DO/AC/H/L/WI/B/R/G
CELEBRATION	C&C 37	6	84	B	D/P/S/B/WI/DO/RF/L/AC
LOVE SONG	C&C LF 38	6	81	B	DO/S/AC/D/R/B/RF/REF/M/BD
SETANTA	C&C LF 38	6	80	B	AC/B/D/H/WI/P/M/R/RF/BD/L
TIR NA NOG	C&C LF 38	7	80	B	D/R/P/S/RF/L
SKERRYVORE	C&C LF 38	6	83	B	D/DO/RF/S/R/BD/B
PEGASUS	C&C LF 38	6	83	B	B/BD/D/RF/WI/DO/P/S
TULUM	C&C 41	8	84	B	D/R/AC/M/H/L/WI/B

LOCATION CODE:

B – Bayfield Municipal Marina located in the heart of this New Englandlike town. Many fine shops and restaurants are within walking distance.

S – Schooner Bay Marina. A small 50-slip full service marina located approximately five miles north of downtown Bayfield. This snug little marina is approximately one hour sailing time closer to the Apostle Islands National Lakeshore.

MARINETTE, WISCONSIN FLEET

Yacht Name	Model	Berths	Year	Optional Equipment
DEJA VU	C&C 27	5	82	D
MAHEALANI	C&C 27	5	80	B/D
FIREDRILL	C&C 27	5	82	D/H/AC/R/M/WI/BD
TRAMP	C&C 29	6	83	D/WI/G/S/BD
WIND DANCER	C&C 29	5	78	C/R/B/D/RF/SS/M
JUBILEE	C&C 29	5	78	AC/R/H/D/BD/B/M
QUINTESSA	C&C 29	6	83	D/WI/DO/L/S/REF/AC/BD/P
CRETEN	C&C 30	5	82	D/AC/H/WI/S/B/R
30 LOVE	C&C 30	5	81	AC/WI/P/D/S/B
TROLL	C&C 30	5	81	D/H/R/P/WI/S/B/BD
SLIGHT INDULGENCE	C&C 32	6	82	D/B/WI/P/AC/S/BD
ANDROMEDA	C&C 34	6	81	D/WI/P/S/AC/B
WEATHERLY	C&C 36	6	79	WI/D/P/C/DO/H/M/R/RF
STARSHIP	C&C LF 38	6	80	D/WI/AC/H/M/L/P/S/RF/
TARDIS	C&C LF 38	6	82	D/AC/WI/DO/H/M/P/S/RF/BD/B
GARDEN OF EDEN	C&C AC 40	6	83	AC/D/WI/DO/P/S/M/L/H/BD/ REF/B
WHY NOT	GB 36	6	83	D/DO/P/S/L/X

SUPERIOR, WISCONSIN FLEET

AMY K	C&C 24	4	78	T/O
ALLEGRO	C&C 24	4	80	T/O
WINDBORNE II	C&C 25	4	77	T/D/M
SANITY	C&C 26	5	79	D
AHNNA-AIMEE	C&C 27	5	75	D/H/B/WI
NICKELODEON	C&C 27	5	80	AC/D/B
SHALOM	C&C 27	5	81	D/AC/H/B
TRANQUILITY II	C&C 27	5	80	D
ATAUCIQ	C&C 30	5	82	D/P/S/DO/WI/H/M/L
INDISCRETION	C&C 30	5	82	AC/D/P/S/B/M/DO/R
CITY MARKET	C&C 30	5	81	D/P/S
RAINBOW	C&C 30	7	76	B/H/D/WI/R/AC
CAJUN IV	C&C 34	6	79	D/P/S
LIAHONA	C&C 34	6	80	D/DO/H/RF/L/P/R/AC/SS
TOOTH FERRY	C&C LF 35	6	83	D/DO/H/RF/L/P/S/BD
MAKANI	C&C 36	6	79	D/P/WI
EXCALIBUR	C&C 37	6	83	AC/D/H/M/P/S/B/WI/L
ANDREA	PEARSON 385	6	84	D/P/RF/WI/B
DESPERADO	C&C 40	8	81	D/WI/H/L/P/S/REF/R
GRANDIOSO	GB 36	6	82	D/DO/P/S/REF/X

*** 1/3 OFF ALL SUPERIOR CHARTERS OF TWO DAYS OR MORE ALL SEASON ***

MANITOWOC, WISCONSIN FLEET

MADELINE II	C&C 34	6	78	D/WI/R/M/B/A/L

SARASOTA, FLORIDA FLEET

PATRICIA ANN	C&C 30	5	82	D/P/S/BD
HERSELF	C&C 32	6	84	D/RF/P/S/BD/B
DULCINEA	C&C LF 35	6	84	D/DO/B/BD/P/S/M/WI/RF
WHY KNOT III	C&C LF 35	6	83	D/P/S/BD
ANEGADA	C&C LF 38	7	79	D/WI/P/R/S/RF/H/B/M/BD

Additional yachts are being added to all fleets. Please call for current listing.

STANDARD EQUIPMENT ON ALL YACHTS:

North Mainsail with Reefs
North 100% Jib with Reefs
North 140-150% genoa
North storm jib
Knotmeter
Ritchie compass
Two complete anchor systems
25W VHF/FM Radiotelephone
Charts/Parallel Rules
Quality Dingy
All Galley Equipment
Bow and Stern Pulpits and Lifelines
Life Jackets
Safety Harnesses
All USCG required equipment
Wheel Steering*
Whisker Pole*
Inboard Engine*

*Unless indicated otherwise

OPTIONAL EQUIPMENT CODE:

A - AM/FM Radio or Stereo
B - Barbecue
BD - Custom Fitted Bedding
C - Cassette
D - Depthfinder
DO - Dodger
G - Compressed Natural Gas
H - Heater
L - Loran
M - Man overboard pole
O - Outboard
P - Propane
R - Radio Direction Finder
RF - Roller Furling
REF - Refrigerator
S - Pressure Water and Shower
SS - Self Steering
T - Tiller
W - No whisker pole
WI - Windpoint/Windspeed
X - Radar

R406

SAILING INSTRUCTION FOR BAREBOAT CHARTER CERTIFICATION

Yachting (Oct. '82) said our sailing instruction program "is one of the most concentrated courses in cruising the medium sized yacht we have ever encountered."
Lakeland Boating (Dec. '82) "Sailboats, Inc. charter certification and sailing school operation is the most highly developed in the area and possibly in the country."

We have several programs designed for sailor and non-sailor alike. All maintain this high degree of professionalism to help you get started right.

METRO CLASSROOM/2-DAY SESSIONS. This program begins with four two-hour classroom meetings in Chicago, Milwaukee, Madison, Minneapolis/St. Paul, or Superior in April, and concludes with two days on-the-water experience out of Bayfield, Wisconsin, Superior, Wisconsin, or Marinette, Wisconsin during May and June. All text and materials will be provided and the on-board instruction of four to five students per yacht/instructor will be held on a late model C&C 29 or 30. $295 Complete

GREAT LAKES – 3-DAY VACATION SESSIONS. These three-day curriculums intersperse the classroom material with the on-the-water experience. Great Lakes vacation bareboat charter certification sessions are available either mid-week or weekend sessions during July and August out of Bayfield, Wisconsin or Marinette, Wisconsin. Price is $295 ($275 mid-week)

CASSETTE INSTRUCTION PROGRAM. Utilizing your cassette recorder and the workbook material supplied with the cassette tape package you are now able to complete the classroom material in the comfort of your own home. The 2 day on-the-water portion is offered out of all of our charter fleet locations and will be taught aboard C&C 29's and 30's. $295 Complete

FLORIDA 8-DAY VACATION SESSIONS. Explore the Gulf Coast of Florida as the Spanish Conquistadors did hundreds of years ago. Discover the treasures of Longboat Key, Venice, Captiva Island, Boca Grande and Tampa Bay aboard your C&C Landfall 38. (The Mercedes of sailing yachts). With 3 separate cabin areas, there is ample room for 5 people during this live-aboard curriculum. This is it, everything is here and everything is included. Contact your travel agent or Northwest Orient. [illegible]

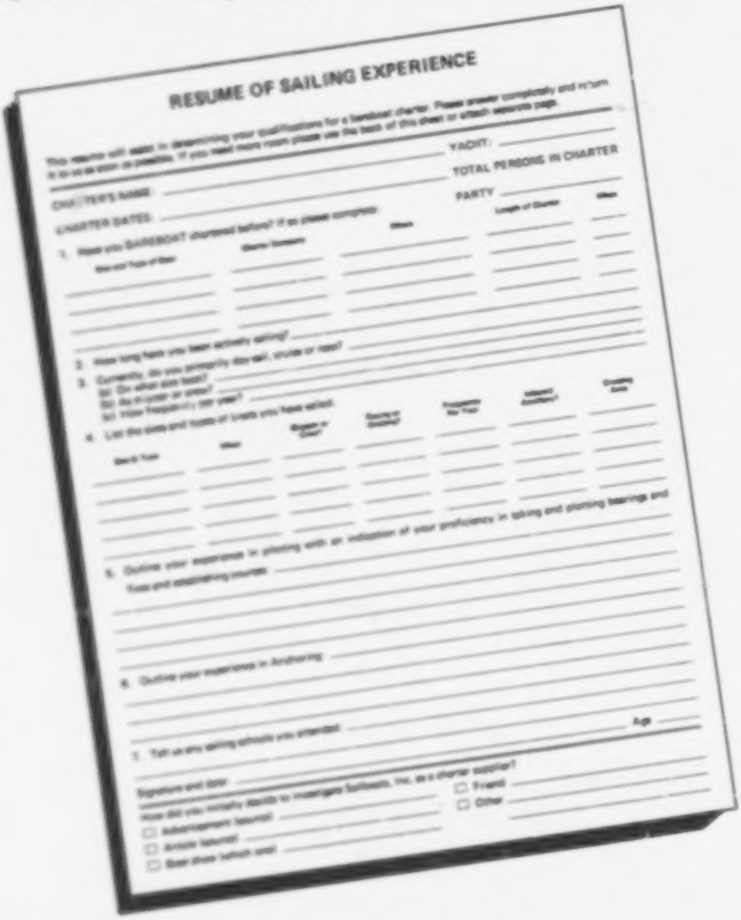
Please call us toll free at [illegible] (in Wisconsin call [illegible]) to receive your free descriptive brochure on our sailing instruction for bareboat charter certification programs.

Member of
NATIONAL
ASSOCIATION
OF SAILING
INSTRUCTORS &
SAILING SCHOOLS

Our instructor/guides are available at all four charter fleet locations for private or individualized instruction at $100 per day plus the cost of the yacht.

QUALIFICATIONS

Bareboat Charter Certification is, of course, necessary . . . both for your protection as well as insurance requirements on the yacht. Certification is simply a demonstration of your sailing skills. Our staff of instructors will provide on-board certification for all new charterers at the time of the charter for those whose resume indicates sufficient experience. We accept certification from other charter operations and recognzied sailing schools. But we do require on-board checkout for all chartering with us for the first time. Many who have had sailing experience in smaller boats have found it very helpful to have an instructor on board for the first day of their charters as a helpful transition to the larger yacht.



RESUME OF SAILING EXPERIENCE

CHARTERER'S NAME ______ YACHT: ______

CHARTER DATES ______ TOTAL PERSONS IN CHARTER PARTY ______

6. Outline your experience in Anchoring ______

Age ______

☐ Friend ______

☐ Other ______

Use this sample resume form for planning purposes. Actual form will be sent upon reserving a yacht.

YACHT PURCHASE OPPORTUNITY

What the Colorado Rockies are to skiing in North America . . . the Apostle Islands and Door County are to summer sailing and cruising.

Longboat Key (Sarasota), Florida is, we believe, simply the finest winter sailing location in North America.

It is these facts, coupled with the GALLUP Survey showing 49% of the U.S. adults want to sail, that assures the continued growth of Sailboats Inc. Charters.

This is our ninth year of operations as a charter agency . . . and, the eighth year of the marketing strategy of emphasizing the best yachts for Great Lakes cruising — C&C YACHTS — managed professionally for the benefit of the charter customers and the yacht owners.

Our 1984 projections require the addition of 20 new C&C Yachts to provide the capacity to meet our projected demand. Some have been sold and commissioned . . . more are needed.

The operating economics of our charter business are such that very little, if any, profit is generated by the charter business per se. We make no apologies for the fact that our benefits are in the form of sampling of our product line and the sale of C&C's which result from this sampling. To meet the objectives of our charter customer and the owner of the yacht, we invest substantially more in staff, facilities, advertising and promotion than other charter operations. Our year-round marketing effort is synergistically related to our other advertising and promotion. In the final analysis, it boils down to our ability to achieve a high repeat rate as a result of satisfaction provided — both to the charter customer and the yacht owner.

SAILBOATS INC. CHARTERS:

- Is probably the largest charter operation in the United States.
- Has had a continuous growth every year of its involvement in the charter business.
- Instruction programs graduate more and more students each year which expands the market base.
- Is a consultant to Grumman Allied Industries, Inc. advising their dealers on setting up charter and sailing instruction programs.
- Ads in Yachting, Sail, Motor Boat and Sailing, Lakeland Boating and Sailing in addition to the ten boat shows per year is far greater than any of our competition.
- Needs additional boats at all locations to meet our demand for the 1984 season.

Every yacht in our fleet is privately owned and is operated as a business by its owner by contract with Sailboats Inc. Charters.

Just give us a call TOLL FREE at 1/800/826-7010 and discover the tax saving advantages of charter yacht ownership. In Wisconsin call 1/800/472-7133 and in the Twin Cities metro area call 612/474-5156.

JUST BRING YOUR TOOTHBRUSH

Your personal gear is all you need to bring. On some yachts, custom fitted bedding is provided. Grocery stores, for purchasing provisions, are nearby all of our charter fleet locations. We provide all the rest. Sail inventory includes main, jib, genoa and storm jib (all North Sails). Signet Knotmeter, Depthfinder, VHF/FM radiotelephone, compass, two complete anchor systems, complete galley equipment, all USCG required equipment, and a quality dinghy (if desired). Many have much, much more equipment. See fleet listing for details.

"NO EXCUSES" GUARANTEE

Thank you for choosing Sailboats Inc. Charters. We want you to feel welcome – and comfortable. That's why we give you this "no excuses" guarantee.

- Your boat will be right. It will be clean, all required equipment will work properly, and you'll have enough of everything you need.
- Or, we will make it right.
- Or, we will refund the cost of your boat for that day.

"No excuses!" If you're not satisfied with your boat, call the manager on duty who will make every effort to correct the problem, or move you to another boat. If these efforts are not satisfactory, and you believe the problem is serious enough to warrant a refund, you must discuss the problem with the manager. If you have any questions or problems obtaining a refund, call 800/826-7010 and ask for the charter refund form.

No other charter operation offers this guarantee – NO ONE!

Again, thank you for giving us the opportunity to serve you. We hope you will have a pleasant charter.

DETACH ALONG LINE & MAIL TO:

SAILBOATS, INC. CHARTERS
250 Marina Drive
Superior, Wisconsin 54880

Please reserve ______________________ **for me the following dates:**

from ______________________ **to** ______________________ .

I do ____ **do not** ____ **plan to board the evening before my charter begins.**

Name ____

Address ____

City ____________________ **State** ______________ **Zip** ________

Phones: (H)____________________ **(O)** ____________________

☐ **Enclosed is my deposit**
☐ **Please bill my account #** ______________________
☐**Master Charge** ☐ **Visa** ☐ **American Express**

Sailboats Inc.
P.O. Box 412, Excelsior, MN 55331

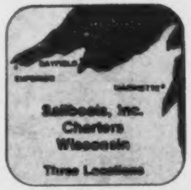
Cochrane's Boat Yard, Excelsior, MN
Showroom (612) 474-5156
Reservations (800) 826-7010

GRAND BANKS

Bulk Rate
U.S. Postage
PAID
Permit No.120
Excelsior, MN

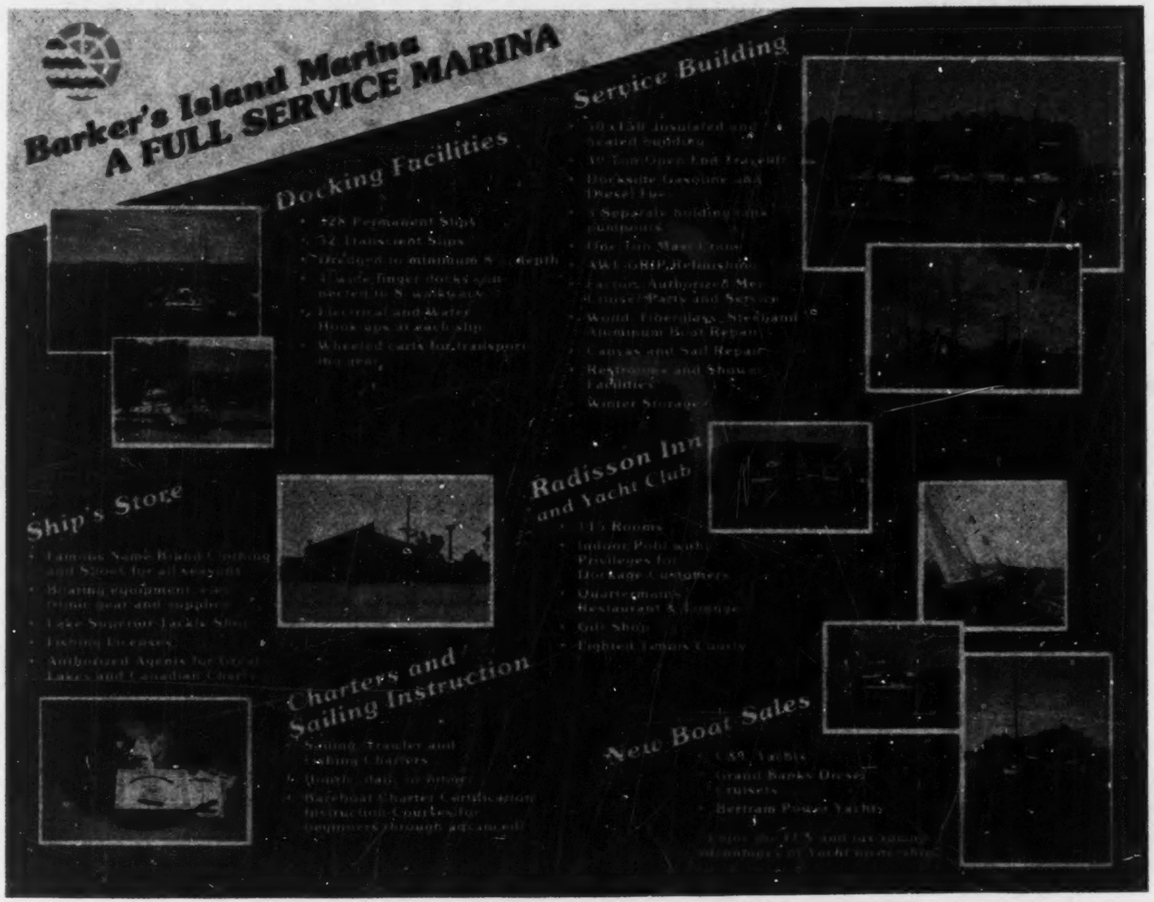
ADDRESS CORRECTION REQUESTED

Barker's Island
Marina
On Magnificent Lake Superior
Superior, WI


BAYFIELD
SUPERIOR
Sailboats, Inc.
Charters
Wisconsin
Three Locations

Sarasota
Sailboats, Inc.
Charters
Florida

C&C quality: the more you're around boats, the more you believe in it.



Barker's Island Marina
A FULL SERVICE MARINA

Docking Facilities

- 428 Permanent Slips
- 32 Transient Slips
- Dredged to minimum 8' depth
- 3' wide finger docks connected to 8' walkways
- Electrical and Water Hook-ups at each slip
- Wheeled carts for transport of gear

Service Building

- 40x150 insulated and heated building
- 30 Ton Open End Travelift
- Dockside Gasoline and Diesel Fuel
- 3 Separate holding tank pumpouts
- One Ton Mast Crane
- AWLGRIP Refinishing
- Factory Authorized Mercruiser Parts and Service
- Wood, Fiberglass, Steel and Aluminum Boat Repair
- Canvas and Sail Repair
- Restrooms and Shower Facilities
- Winter Storage

Ship's Store

- Famous Name Brand Clothing and Shoes for all seasons
- Boating equipment, fishing gear and supplies
- Lake Superior Tackle Shop
- Fishing Licenses
- Authorized Agents for Great Lakes and Canadian Charts

Radisson Inn
and Yacht Club

- 115 Rooms
- Indoor Pool with Privileges for Dockage Customers
- Quartermain's Restaurant & Lounge
- Gift Shop
- Lighted Tennis Courts

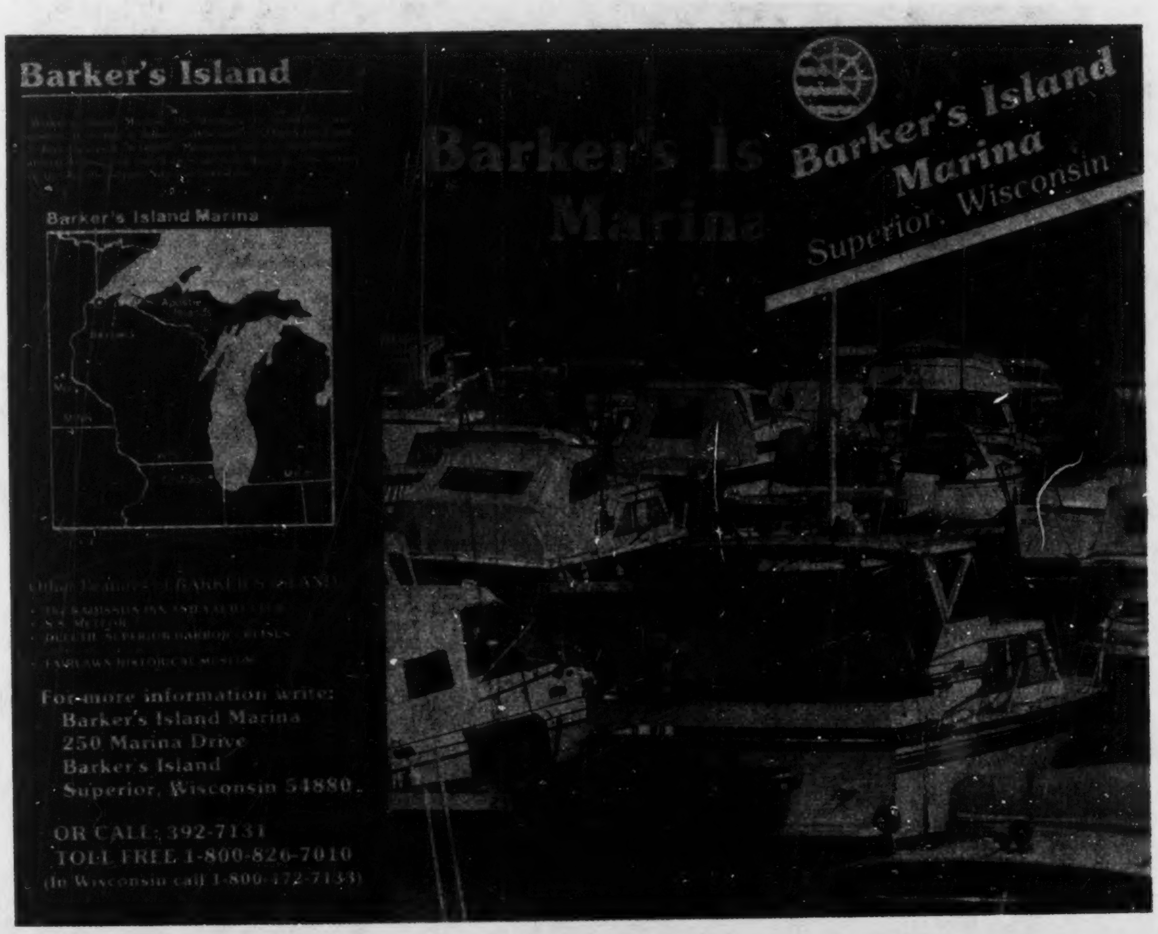
Charters and Sailing Instruction

- Sailing, Trawler and Fishing Charters
- Hourly, daily or longer
- Bareboat Charter Certification Instruction Courses for beginners through advanced

New Boat Sales

- C&C Yachts
- Grand Banks Diesel Cruisers
- Bertram Power Yachts

Enjoy the FUN and tax saving advantages of Yacht ownership



Barker's Island

Barker's Island Marina

For more information write:
Barker's Island Marina
250 Marina Drive
Barker's Island
Superior, Wisconsin 54880

OR CALL: 392-7131
TOLL FREE 1-800-826-7010
(In Wisconsin call 1-800-472-7133)

Barker's Island
Marina
Superior, Wisconsin

Senator **Kasten**. I think we'll do the same with this panel and will ask questions to the group of you as a whole.

Next is Mr. Pat Miller, who is the superintendent of the Apostle Island National Lakeshore, Bayfield, WI. Pat, we had a chance to spend a little time together last summer out there, and we're happy to have had the chance also to work with you toward improving the facilities there, but thank you so much for coming over and we look forward to your testimony.

STATEMENT OF PAT H. MILLER, SUPERINTENDENT, APOSTLE ISLANDS NATIONAL LAKESHORE, BAYFIELD, WI

Mr. **Miller**. Thank you, Mr. Chairman, for taking an interest in our area, and I appreciate the opportunity to address this subcommittee.

The National Lakeshore is located on the mainland of northern Wisconsin and contains 20 of Lake Superior's 22 Apostle Islands.

Tourism in the Apostle Islands area was promoted as early as 1857 by Lake Superior steamship lines, profiting from the opening of the Sault locks in 1855. The island scenery was celebrated and the climate considered as healthful for sufferers of hay fever and other summer discomforts. A small community on Madeline Island, which had flourished since the fur trade era, offered accommodations to tourists in the 1860's; Mrs. Abraham Lincoln and her son, Robert Todd Lincoln, were notable visitors in 1868.

When the railroads reached the Chequamegon Bay area in the 1880's, tourism boomed. Large hotels were built in Bayfield and Ashland to accommodate summer residents and vacationers, while steamers ran daily schedules among the islands for sightseers.

Tourism remained strong in the Apostle Islands up to the Great Depression. Chequamegon Bay was heavily visited, and some 69,000 passengers were carried between Ashland, Washburn, Bayfield, and the Apostle Islands in 1917. President Coolidge was a celebrated visitor to Madeline and Devils Islands in 1928.

However, as the region's industries declined and fewer vessels were active in the bay, island tourism changed as well. The 1940's saw the development of a hunting and sport fishing clientele, with mainland charters bringing sportsmen to the islands.

The islands were first studied by the National Park Service for national park status in 1930, but it was not until 1970 that an act was passed to create the Apostle Islands National Lakeshore. This was a formal and renewed recognition of people's attraction to the area as a viable and important adjunct to northern Wisconsin economy, as well as a recommitment to protecting Lake Superior's natural resources.

The traditional forms of visitor use still flourish. Boat excursions to the islands are increasingly in demand and boating has become a major recreation. The National Lakeshore is providing visitor facilities including docks, trails, and campsites on the islands, and is interpreting the outstanding historic and natural features of the archipelago; many of the cultural resources that attracted visitors to the area 100 years ago are being rehabilitated and restored for today's public use and enjoyment. Adjacent municipalities and local business people also recognize this potential and new private and public marinas have been developed in and around Bayfield, Washburn, Ashland, and Superior.

The tourism industry in northern Wisconsin, and indeed in the Lake Superior and Michigan basins, both historically and presently, is based on a unique blend of forest ecology and interesting geologic formations integrated with historic artifacts—but it is predicated on clean water and air.

These pristine conditions enticed some 140,000 people to visit the Apostle Islands National Lakeshore, alone, in 1983. They sailed, took excursion tours, camped, hiked, fished and swam. These figures can be expanded manyfold throughout Lake Superior and the Great Lakes basins. In 1981, the Wisconsin Division of Tourism estimated that Ashland and Bayfield Counties derived some $39 million from tourism. This is a major factor in the economies of many communities throughout the upper Great Lakes system and adjacent areas. People come from all over the country to enjoy the north woods and the big lakes. In fact, visitors from 48 States and 19 foreign countries came to the Apostle Islands National Lakeshore Headquarters Visitor Center in Bayfield in 1982.

It is important for you to understand that to increase or retain this very significant industry, the integrity of the region's natural resources must be maintained at a high level. When the Great Lakes are considered for other economic uses, their impacts on the natural ecosystems, water quality and atmosphere must be given serious appraisal and placed in proper perspective. The lakes—especially the upper lakes—are very valuable as a clean system and should not be used as a large septic system. Research data and environmental impacts should be carefully weighed before converting the lake to a reservoir to be manipulated for other economic considerations. It is imperative for all concerned to share knowledge on a systematic basis because the resource is too valuable for the sake of present and future generations to jeopardize.

Many small businesses are predicated on the retention or further clean-up of the lakes. Water quality, clean air, and lake levels are just some of the factors that influence small businesses based on tourism. Commercial and sport fishing, sightseeing, and other water-related activities must be considered when any thought is given to disturbing the natural conditions of the lakes.

Therefore, we support efforts that help to intelligently utilize the lake's resources and do so without degrading them environmentally. A consolidation of scientific data should help most organizations more efficiently meet their goals and, hopefully, provide a base for mutual benefit of the lakes' environment and peripheral economy.

Thank you.

Senator KASTEN. Pat, thank you very much.

[The prepared statement of Mr. Miller follows:]

PAT H. MILLER, SUPERINTENDENT
APOSTLE ISLANDS NATIONAL LAKESHORE, BAYFIELD, WISCONSIN

Before The

SUBCOMMITTEE ON ENTREPRENEURSHIP AND SPECIAL
PROBLEMS FACING SMALL BUSINESS

SENATE SMALL BUSINESS COMMITTEE

August 28, 1984

I am Pat H. Miller, Superintendent of Apostle Islands National Lakeshore, with headquarters in Bayfield, Wisconsin. I appreciate the opportunity to address the Subcommittee.

The National Lakeshore is located on the mainland of northern Wisconsin and contains 20 of Lake Superior's 22 Apostle Islands.

Tourism in the Apostle Islands area was promoted as early as 1857 by Lake Superior steamship lines profiting from the opening of the Sault locks in 1855. The island scenery was celebrated and the climate considered as healthful for sufferers of hayfever and other summer discomforts. A small community on Madeline Island which had flourished since the fur trade era offered accommodations to tourists in the 1860's; Mrs. Abraham Lincoln and her son, Robert Todd Lincoln, were notable visitors in 1868.

When the railroads reached the Chequamegon Bay area in the 1880's, tourism boomed. Large hotels were built in Bayfield and Ashland to accommodate summer residents and vacationers, while steamers ran daily schedules among the islands for sightseers.

Tourism remained strong in the Apostle Islands up to the Great Depression. Chequamegon Bay was heavily visited and some 69,000 passengers were carried between Ashland, Washburn, Bayfield and the Apostle Islands in 1917. President Coolidge was a celebrated visitor to Madeline and Devils Islands in 1928.

However, as the region's industries declined and fewer vessels were active in the Bay, island tourism changed as well. The 1940's saw the development of a hunting and sport fishing clientele, with mainland charters bringing sportsmen to the islands.

The islands were first studied by the National Park Service for national park status in 1930 but it was not until 1970 that an act was passed to create the Apostle Islands National Lakeshore. This was a formal and renewed recognition of people's attraction to the area as a viable and important adjunct to northern Wisconsin economy, as well as a recommittment to protecting Lake Superior's natural resources.

The traditional forms of visitor use still flourish. Boat excursions to the islands are increasingly in demand and boating has become a major recreation. The National Lakeshore is providing visitor facilities including docks, trails and campsites on the islands and is interpreting the outstanding historic and natural features of the archipelago; many of the cultural resources that attracted visitors to the area 100 years ago are being rehabilitated and restored for today's public use and enjoyment. Adjacent municipalities and local business people also recognize this potential and new private and public marinas have been developed in and around Bayfield, Washburn, Ashland, and Superior.

The tourism industry in northern Wisconsin, and indeed in the Lake Superior and Michigan basins, both historically and presently, is based on a unique blend of forest ecology and interesting geologic formations integrated with historic artifacts--but it is predicated on clean water and air.

These pristine conditions enticed some 140,000 people to visit the Apostle Islands National Lakeshore, alone, in 1983. They sailed, took excursion tours, camped, hiked, fished and swam. These figures can be expanded manyfold throughout Lake Superior and the Great Lakes basins. In 1981, the Wisconsin Division of Tourism estimated that Ashland and Bayfield Counties derived some $29,000,000 from tourism. This is a major factor in the economies of many communities throughout the upper Great Lakes system and adjacent areas. People come from all over the country to enjoy the "north woods" and the big lakes. In fact, visitors from 48 states and 19 foreign countries came to the Apostle Islands National Lakeshore Headquarters Visitor Center in Bayfield in 1982.

It is important for you to understand that to increase or retain this very significant industry, the integrity of the region's natural resources must be maintained at a high level. When the Great Lakes are considered for other economic uses, their impacts on the natural ecosystems, water quality and atmosphere must be given serious appraisal and placed in proper perspective. The lakes--especially the upper lakes--are very valuable as a "clean" system and should not be used as a large septic system. Research data and environmental impacts should be carefully weighed before converting the lake to a reservior to be manipulated for other economic considerations. It is imperative for all concerned to share knowledge on a systematic basis because the resource is too valuable for the sake of present and future generations to jeopardize.

Many small businesses are predicated on the retention or further clean-up of the Lakes. Water quality, clean air and lake levels are just some of the factors that influence small businesses based on tourism. Commercial and sport fishing, sightseeing, and other water-related activities must be considered when any thought is given to disturbing the natural conditions of the Lakes.

Therefore, we support efforts that help to intelligently utilize the Lake's resources and do so without degrading them environmentally. A consolidation of scientific data should help most organizations more efficiently meet their goals and, hopefully, provide a base for mutual benefit to the Lakes' environment and peripheral economy.

Senator **Kasten**. The last witness on our panel on tourism and the recreation industry is Mr. Dave Brown, who is the editor of Lakeland Boating magazine, from Port Clinton, OH. Dave, we not only appreciate your being here and appreciate your testimony, but we also appreciate the fact that you have traveled from Ohio—near Cleveland, I understand; is that close to right?

Mr. **Brown**. Close to Toledo.

Senator **Kasten**. Toledo, all right. But we really appreciate you coming all the way here to testify before our subcommittee. And I might also say that we appreciate the editorial support that your publication has given our efforts in terms of the legislative bill we have, the save the lakes bill.

Mr. Dave Brown, the editor of Lakeland Boating from Clinton, OH.

STATEMENT OF DAVID G. BROWN, EDITOR, LAKELAND BOATING MAGAZINE, PORT CLINTON, OH

Mr. **Brown**. As you mentioned, I am the editor of Lakeland Boating magazine. It is devoted exclusively to recreational boating on the Great Lakes. And as such, if the environmental quality of the Lakes were to decline, it would make boating on them less attractive. This, in turn, would lead to a decline in the profitability of what is the most important small business in the country to me, mine. [Laughter.]

Most of my life has been spent boating the Great Lakes. I have cruised extensively on Lakes Michigan, Huron, Erie, and Ontario, and I look forward to Lake Superior. Having grown up in Cleveland, OH, most of my experience is naturally with Lake Erie, and I think this is good for the purposes of this hearing because Lake Erie is a perfect demonstration laboratory to discover the impact of changes in the environmental quality on the Lakes.

It is the shallowest of the five Great Lakes, and in some ways, can be considered just a wide spot in the river between Lake Huron and Niagara Falls. Because it is shallow, Lake Erie responds very quickly to changes in pollution. There is an old saying that "dilution is the solution to pollution." In Lake Erie, there just isn't much water for dilution.

As late as 1956 and 1957, I have personally seen floating human sewage on Lake Erie off sewer outfalls along the Ohio shoreline. It isn't pleasant to talk about, but it is true. Running through them in my family's 13-foot Lyman was like boating in a cesspool.

We've heard jokes about the Cuyahoga River which runs through Cleveland. I can't vouch for the stories about it catching fire, but I do know the pollution in the Cuyahoga reached epic proportions. In 1961, I witnessed the destruction of an outboard motor caused by river pollution. Chemicals in the water—and I don't know what they were—caused the motor's water pump impeller to disintegrate. Loss of cooling water brought the motor to an abrupt and expensive halt.

Swimming in Lake Erie during the hot summer months of 1962 and 1963 was impossible. A thick, stinking green algae bloom covered the surface. It was sort of like swimming in cold pea soup.

Perhaps the most obvious result was the near disappearance of sport and commercial fishing due to the disappearance of game fish. During the early 1950's, Lake Erie was known worldwide for its fishing. I can remember eating lunch in 1957 with two South African businessmen who had flown to the Lake Erie islands just to try their luck trolling for walleye. In 1958, it was as if somebody had thrown a switch, and the fish disappeared.

Those were the bad old days. Today, things have changed dramatically for the better. There's no algae bloom and the water is clear to depths of 10 feet in many places, which is unusual for Lake Erie. Best of all, the fishing is back. In fact, sport fishing on Lake Erie has become a multimillion dollar business; for many towns, it is the No. 1 industry.

According to Dr. Leroy Hushak of the Ohio State University Sea Grant Program, the walleye harvest in 1982 was more than 3 million fish and 12 million yellow perch were taken. Those are impressive figures, but more importantly, Dr. Hushak estimates that the value of the Lake Erie sport fishery in 1981 was between $140 million and $200 million. I don't know of any more recent figures, but I do know from firsthand experience living in the heart of the walleye area that sport fishing activity has increased considerably from 1981, and I would say it might be double from what he found 3 years ago.

Fishing, of course, isn't the only thing that depends on clean water. Recreational boating also requires a healthy environment. Dr. Kenneth Wenner, also of Ohio Sea Grant, studied 237 boating businesses in the 8 Ohio counties bordering Lake Erie. He found that the typical boating business has an average income of $650,000. The study reports a payroll of nearly $7 million going to more than 800 full-time employees. The businesses paid nearly $300,000 in city, $163,000 in county, $551,000 in State, and $554,000 in Federal taxes in the year of the study.

These numbers are duplicated by boating businesses in every port on the Great Lakes. Let me cite Lake Michigan as an example. Lew Timberlake, a harbormaster at the Michigan City, IN, Port Authority, tells me that his harbor brings an estimated $25 million into the Michigan City economy every year. This amount was determined by a 1981 study done by Indiana University. That same study found that the harbor employed 30 full-time people, and that boats using Michigan City as their home port bring $150,000 in personal property taxes.

The thing to remember is that boating is an industry of small businesses. Mom and pop operations are the rule at marinas, boat stores, and even boat and hardware factories. Because of this, boating businesses are profoundly influenced by minor changes in their operating environment. They simply do not have the cash reserves to carry them through prolonged economic hard times. Instead, they go out of business.

Even a minor decline in the environmental quality of the Lakes would mean rapid unemployment and business failures among boating businesses. Presumably, it would occur first among the sport fishing businesses such as the independent charter captains, tackle stores, and bait shops. Eventually, boat stores would see a decline in the sales of fishing boats and related equipment.

I have no doubts that if the Great Lakes were to decline in environmental quality, we would see rapid negative economic consequences. Although the total loss of income and jobs might be small when compared to the closing of an automobile plant or steel mill, keep in mind that most of the jobs lost would be in relatively small communities.

At the present time, no single government agency oversees the five Great Lakes. Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York have their individual agencies, regulations, and laws. In addition, Canada and the Province of Ontario add a foreign note to the mix.

You can fish for lake trout in Lake Michigan year around in one State but not another. Ohio has outlawed commercial netting of walleye and perch, yet allows fish caught in Canadian waters—which border on Ohio—to be imported in unrestricted numbers. Michigan, Wisconsin, and Ontario have tight restrictions on boat toilets while other States have really no restrictions, other than the Federal laws. For years, Detroit has been one of the worst polluters of Lake Erie; yet, Michigan restricts dangerous phosphates in detergents, while Ohio does not.

Things get even worse when you look at the threat of serious pollution. Millions of people in Duluth, Green Bay, Milwaukee, Chicago, Muskegon, Saginaw, Detroit, Toledo, Cleveland, Erie, Buffalo, and Rochester drink Great Lakes water. If a threatening poison were dumped into the lakes, no one knows what would happen. Would it pollute that city water? Would it dissipate? We don't know.

The sad fact is, we know more about ocean currents than we do about the Great Lakes. We know about the ocean floor more than we know about the Great Lakes; yet, attempts to control the Federal budget always include cuts in the money dedicated to Great Lakes research.

In April 1983, my magazine reported that Bob Pickett of the Great Lakes Environmental Research Laboratory in Ann Arbor, MI, had been forced to use ordinary grocery store oranges as scientific instruments because he doesn't have the budget necessary for the appropriate equipment. He is using hand-me-down current drifters in an attempt to study patterns of Lake Michigan. His research could prove vital to the health and welfare of everyone drinking water from that lake, but he still is getting virtually no money.

Every State surrounding Lake Michigan stocks coho or chinook salmon into the waters. This is politically wise, considering the number of votes represented by the thousands of anglers. But, in February 1984, Lakeland Boating reported that overstocking of salmon could trigger a complete collapse of the coho and chinook fishery, and it's almost certain to happen. There's no central control over the stocking.

The reason for all of these problems is the lack of central control and planning on the Great Lakes. The time is long past when the individual county, city, and State governments can handle the problem.

For this reason, Lakeland Boating has gone on record urging passage of your bill to save the Great Lakes in our editorial policies.

Senator KASTEN. Dave, thank you very much.

[The prepared statement of Mr. Brown follows:]

STATEMENT BY

David G. Brown, co-owner & editor of Lakeland Boating Magazine
106 W. Perry Street, Port Clinton, OH 43452
Before Subcommittee On Entrepreneurship & Small Businesses
Senate Small Business Committee
August 28, 1984

Let me start by saying that I am a small business owner who is virtually dependent upon the environmental quality of the Great Lakes for the success of my business. My business is publishing Lakeland Boating, a magazine devoted almost exclusively to recreational boating on the Great Lakes. Should the environmental quality of the lakes decline, it would make boating on them less attractive. In turn, this would lead to a decline in the profitability of my magazine.

It should be obvious that I am not an unbiased observer in this case. In fact, the opposite is true. I am an unabashed champion of improving the Great Lakes in all respects.

Historical View

Most of my life has been spent boating the Great Lakes.

Brown

I have cruised extensively on Lakes Michigan, Huron, Erie and Ontario. Having grown up in Cleveland, Ohio, most of my experience is naturally with Lake Erie. However, this is good in that Lake Erie is a perfect "demonstration laboratory" to discover the impact of changes in the environmental quality of the lakes.

Lake Erie is the shallowest of the five Great Lakes. In fact, in some ways it can be considered just a wide spot in the river between Lake Huron and Lake Ontario. Geologists say that Lake Erie will be the first of the Great Lakes to disappear through natural silting. We don't have to worry, though, this shouldn't happen for millions of years.

Because Lake Erie is shallow, pollution and changes in water level have a more profound impact on water quality than in the deeper lakes. Lake Erie simply has less water to dillute pollutants. There's an old saying that "dillution is the solution to pollution." In Lake Erie, there's not much water for dillution.

As late as 1956 and 57 I have personally seen floating human sewage on Lake Erie off sewer outfalls along the Ohio shoreline. This isn't pleasant to talk about, but it's true. Running through them in my family's 13 foot Lyman was like boating in a cesspool.

We've all heard jokes about the Cuyahoga River which runs through Cleveland, Ohio. I can't vouch for the stories about the river catching fire, but I do know the pollution in the Cuyahoga reached epic proportions. In 1961, I personally witnessed the destruction of an outboard motor caused by river pollution. Chemicals in the water...I don't know exactly what they were...caused the motor's water pump impeller to disintigrate. Loss of cooling water brought the motor to an expensive halt.

Swimming in Lake Erie during the hot summer months of 1962 and 63 was impossible. A thick, stinking green algae "bloom" covered the surface. It was about as attractive as swimming in cold pea soup.

Perhaps the most obvious result of pollution was the near disappearance of sport and commercial fishing due to the disappearance of game fish. During the early 1950s, Lake Erie was known world-wide for its fishing. I can remember eating lunch in 1957 with two South African businessmen who had flown to the Lake Erie islands just to try their luck trolling for walleye. In 1958, it was as if somebody threw a switch. The fish disappeared.

Today's Situation

Those were the bad old days. Today, things have changed dramatically for the better. There's no algae "bloom" and the water is clear even to depths of ten feet. Best of all, the fishing is back. In fact, sport fishing on Lake Erie has become a multi-million dollar business. For many towns along the southern shoreline, sport fishing is now the number one industry.

Brown

According to Dr. Leroy J. Hushak of the Ohio State University Sea Grant Program, the walleye harvest in 1982 was more than 3-million fish. More than 12-million yellow perch were taken that same year. It's estimated that anglers spent 1.9 million fishing days on Lake Erie in 1982.

Those are impressive figures, but the dollars involved are even more significant. Dr. Hushak estimates that the value of the Lake Erie walleye sport fishery in 1981 was between 140 and 200-million dollars. I don't know of any more recent figures, but I can say from fist-hand experience living in the heart of the walley area that sport fishing activity has increased considerably from 1981. Today, it may well be double what Dr. Hushak estimated three years ago.

Fishing isn't the only thing that depends upon clean water. Recreational boating also requires a healthy environment. Dr. Kenneth A. Wenner, also of the Ohio Sea Grant reports on a study of 237 boating businesses in the eight Ohio counties boardering Lake Erie. His study was done in 1980, so the numbers are undoubtedly lower than what would be found today. But, they provide an insite to the value of the recreational boating industry to the economy as a whole.

Dr. Winner found that the typical boating business has an average income of $650,000. The study reports a total payroll of nearly 7-million dollars going to more than 800 full-time employees. During the year of the study, these Ohio Lake Erie boating businesses paid nearly $300-thousand in city, $163-thousand in county, $551-thousand in state and

$544-thousand in federal taxes.

These numbers are duplicated by boating businesses in every port on the Great Lakes. Let me cite a Lake Michigan example. Lew Timberlake, harbormaster of the Michigan City (Indiana) Port Authortity tells me that his harbor brings an estimated $25-million into the Michigan City economy every year. This amount was determined by a 1981 study done by Indiana University. That same study found that the harbor employed 30 people full time and that boats using Michigan City as their home port bring $150-thousand in personal property taxes.

Small Business Involvement

Boating is an industry of small businesses. "Mom & Pop" operations are the rule at marinas, boat stores and even boat and hardware factories. Because of this, boating businesses are profoundly influenced by minor changes in their operating environment. They simply do not have the cash reserves to carry them through prolonged economic hard times. Instead, they simply go out of business.

Even a minor decline in the environmental quality of the lakes would mean rapid unemployment and business failures among boating businesses. Presumably, this would occur first among the sport fishing businesses such as the independent charter captains. Bait and tackle stores would feel it next. Eventually, boat stores would see a decline in the sales of fishing boats and related equipment.

The Mercurial nature of the boating business was demonstrated by the ill-timed weekend boating ban proposed by the Carter Administration. Within hours, new boat sales simply stopped. Within days boat companies were declaring bankruptcy and "Mom & Pop" boat stores were going out of business. Even though the ban was rescinded, just proposing it plunged the marine industry into a depression far worse than anything experienced in the automobile industry.

I have no doubts that if the Great Lakes were to decline in environmental quality, we would see rapid negative economic consequences. Although the total loss of income and jobs might be small when compared to the closing of an automobile plant or steel mill, keep in mind that most of the lost jobs would be in relatively small communities. The loss of 60 jobs in a town of 6,000 people has the impact on the local economy of losing 60,000 jobs in a city of 6-million.

How Secure Are The Great Lakes?

At the present time, no single governmental agency oversees the five Great Lakes. Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania and New York all have their individual agencies, regulations and laws. In addition, Canada and the province of Ontario add a foreign note to the mix of governments. The result is polite chaos.

You can fish for lake trout in Lake Michigan year 'round if you're in one state, but not if you're in another. Ohio has virtually outlawed commercial netting of walleye and perch, yet allows fish caught in Canadian waters to be imported in unrestricted numbers. Michigan, Wisconsin and Ontario have tight restrictions on boat toilets (marine sanitation devices) while other states have virtually no regulation. For years, Detroit has been one of the worst pollutors of Lake Erie, yet Michigan restricts dangerous phosphates in detergents while Ohio does not.

Things are even worse when you look at the threat of serious pollution. Millions of people in Duluth, Green Bay, Milwaukee, Chicago, Muskegon, Saginaw, Detroit, Toledo, Cleveland, Erie, Buffalo and Rochester drink Great Lakes water. If a threatening poison were dumped into the lakes, no one knows what would happen. Would it pollute city water? Would it dissipate? We simply don't know.

The sad fact is we know more about ocean currents than we do about those in the Great Lakes. We know more about the ocean floor than the bottom of the Great Lakes. Yet, attempts to control the federal budget always include cuts in the money dedicated to Great Lakes research.

In April, 1983 my magazine reported that Bob Pickett of the Great Lakes Environmental Research Laboratory in Ann Arbor has been forced to use ordinary grocery store oranges as scientific instruments because he does not have the budget necessary for the appropriate equipment. Pickett is using hand-me-down current drifters in an attempt to study current patterns in Lake Michigan. His research could prove vital to the health and welfare of everyone drinking water from that lake, but he still gets virtually no money.

Virtually every state surrounding Lake Michigan stocks either coho or chinook salmon into its waters. This is politically wise considering the number of votes represented by the thousands of anglers who enjoy coho fishing. But, in February, 1984 we reported that overstocking of salmon could trigger a complete collapse of the coho and chinook fishery...and that it is almost certain to happen.

The reason for all of these problems is the lack of central control and planning for the Great Lakes. The time has long passed when the individual city, county and state governments could handle the problem.

For this reason, Lakeland Boating has gone on record urging the passage of Senator Kasten's bill to create a new office within the National Oceanic and Atmospheric Administration dedicated soley to the Great Lakes.

VIEW FROM THE BRIDGE

By David G. Brown

The Great Lakes are caught in a bureaucratic nightmare. Two countries, one province, eight states and fifteen U.S. government agencies are involved in managing or regulating the lakes. To boaters this labyrinth of bureaucracy means confusion over head laws, fishing regulations and safety requirements. But, making life miserable for boat owners is only a minor aspect of the problem. Millions of people depend upon the lakes for safe drinking water, for jobs and for recreation. The patchwork quilt of governmental agencies effectively prevents finding solutions to problems such as pollution or fish management.

Last May in this magazine Paul McElroy reported that efforts to stock salmon in Lake Michigan may trigger an ecological disaster. The irony is that the very efforts being made to increase coho and chinook population could bring about the exact opposite result. Over population of salmon could reduce the forage base, causing the ultimate disappearance of coho and chinook. This month in **Now Hear This**, we have a new report that confirms McElroy's article. Salmon in Lake Michigan may be effectively eliminating their prime source of food, alewives.

Despite the obvious magnitude of the potential Lake Michigan salmon disaster, nobody is responsible for preventing it. Certainly none of the state or federal agencies having jurisdiction over the lake want to see the coho disappear. But, each individual agency is responsible for only one small portion of the problem. No single agency is responsible for providing a coordinated, lake-wide solution. What's worse is the fact that even if one agency did have the right solution, its work might be unwittingly undone by other bureaucrats in other agencies.

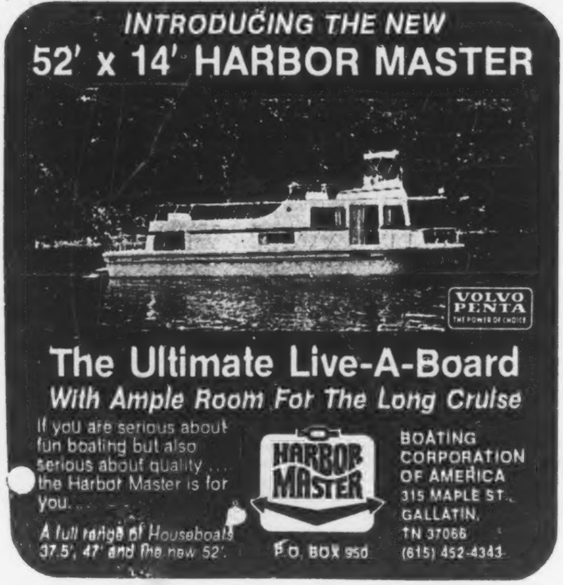
Public health is also threatened by the problem of overlapping jurisdictions and the lack of overall responsibility. Potentially deadly pollutants such as PCBs can be found in many species of fish. Often, one state will issue a warning about contaminated fish, but no warning will be issued by contiguous states bordering on the same lake. "Just because you cross the border from one state to the next doesn't mean the fish are safer to eat," says Dr. Eugene Aubert, director of the Great Lakes Research and Environmental Laboratory.

Wisconsin Senator Robert Kasten, Jr. (R) is concerned enough about the problem of overlapping bureaucracies that he has introduced a bill to solve the problem. "While the individual agencies perform important functions," Senator Kasten says, "they are not doing an adequate job. Efforts are frequently duplicated. Worse yet, major issues fall between the cracks." His bill would create a new office within the National Oceanic and Atmospheric Administration dedicated solely to the Great Lakes.

Under Kasten's bill, this new office would have complete responsibility for the Great Lakes. It would be required to identify all of the smaller government agencies involved with the lakes. It would set up a research exchange to be sure that scientists in Illinois know about research being done in Minnesota or Ohio. Most important, this new office would set priorities for Great Lakes research and publish an annual "State of the Lakes" report. Significantly, Kasten's bill calls for this new NOAA office to be located in one of the Great Lakes states.

Lakeland Boating fully supports Senator Kasten's bill and urges Senators and Representatives from the other Great Lakes states to work for its passage. Those of us who live on the lakes and love the lakes can no longer tolerate continued non-management of the Great Lakes. If you agree, don't write us . . . write your Congressman.

Dave



INTRODUCING THE NEW
52' x 14' HARBOR MASTER

The Ultimate Live-A-Board
With Ample Room For The Long Cruise

If you are serious about fun boating but also serious about quality . . . the Harbor Master is for you. . . .

A full range of Houseboats 37.5', 47' and the new 52'.

P.O. BOX 950

BOATING
CORPORATION
OF AMERICA
315 MAPLE ST.,
GALLATIN,
TN 37066
(615) 452-4343

CURRENT DRIFTERS

Radio Buoys Track Great Lakes Currents

By David G. Brown

Bob Pickett once took a taxi to the middle of a bridge over the Cuyahoga River in Cleveland, OH. While the bemused taxi driver watched, Pickett dropped a half dozen fresh oranges to the water below. Although his actions may seem a bit odd, Pickett was motivated by scientific curiosity. He was learning the speed and direction of surface currents in the river.

Oranges aren't perfect current meters, but they're cheap. The lack of funding for scientific study of the Great Lakes doesn't allow for purchasing expensive equipment. Those bright spheres provided enough contrast with the murky water for Pickett to observe their movements in the river currents. He got his information for pennies, although not with the accuracy he desired.

As a researcher at the Great Lakes Environmental Research Laboratory in Ann Arbor, MI, Pickett is now using remote transmitting buoys and satellites in his studies. Things haven't really improved. The oranges in the Cleveland experiment were new, but Pickett's buoys are hand-me-downs from salt water research projects.

Pickett is measuring the currents which flow in Lake Michigan and plotting their speeds and directions. The results of his work may one day give a boost to boats in the Chicago to Mackinac race. But, helping racing sailboats isn't the real goal. There's a far more serious reason for learning the currents in the Great Lakes.

Toxic waste spills are becoming an unfortunate fact of modern life. Nearly 30 times a year somebody dumps a poisonous chemical or a slug of oil into the lakes. Right now, there is no way of telling where that toxic material will go as it moves with lake currents. With no way of predicting the movement of toxic substances, Coast Guard cleanup efforts are hamstrung.

This is a serious problem. Millions of people get their drinking water from the Great Lakes. What would happen if somebody dumped a tank car full of cyanide into Lake Michigan? Whose water would be poisoned? Nobody had any way of answering those questions.

So, Pickett has rounded up four surplus current drifter buoys. They were designed to be dropped in the ocean where they would operate until their batteries went dead. Low cost made these buoys expendable to salt water researchers.

But, the Great Lakes research budget doesn't allow Pickett to use the word "expendable." He spent last winter fixing the fiberglass covering on his buoys and replacing their batteries. Once they have completed this summer's research, he will pick them up and go through the restoration process again so research can continue in 1984.

Current drifters are orange cylinders which float upright in the water. A small sea anchor keeps them moving with the current. Inside, each carries a radio transmitter which sends its position to a TIROS satellite. Position information is sent from the satellite to an earthbound computer which keeps track of each buoy's movements. This computer can print out a chart showing the path traveled by each buoy.

Obviously, a large number of drifters would be necessary to determine the set and drift of all the currents in Lake Michigan. Four aren't enough. So, Pickett has to use his over and over again. Thus, despite the lack of money and inadequate equipment, he is getting useful information.

A general flow of water seems to be setting northward along the Michigan shoreline. Water appears to be flowing counterclockwise in the southern end of the lake, then northward past Holland, Muskegon, Ludington and Manistee.

The average speed recorded by the drifters has been about a half mile an hour. However, one recorded a sudden spurt of almost 3 miles an hour for a short time. The significance of a half mile an hour current should be obvious to anyone racing northward this summer.

Another interesting fact is that the drifters move in small circles as well as in a general direction. These circles are apparently caused by the rotation of the earth. They are only a few kilometers in diameter and always clockwise in direction.

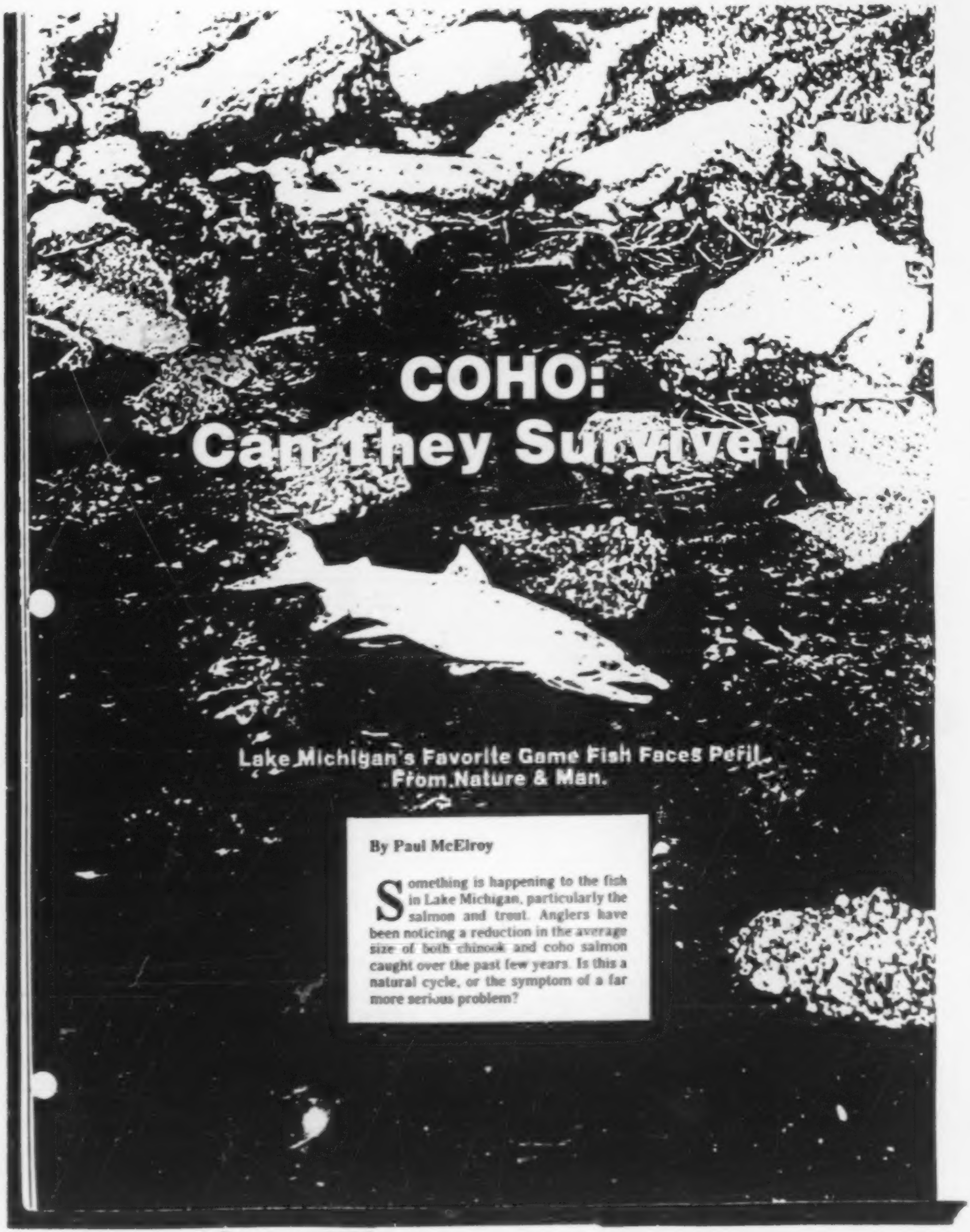
It is far too early to draw any firm conclusions from the movements of the buoys. Not enough information has been collected. More than a single season may be necessary to collect the data. After that will come months of study before accurate predictions of Lake Michigan currents can be made. It will be years before accurate current charts of all five Great Lakes can be drawn.

In the meantime, funding for this research is in jeopardy. It may become a victim of budget cutting in Washington. The Great Lakes Environmental Research Laboratory has been threatened with closing by the National Oceanic and Atmospheric Administration (NOAA) as a cost-cutting measure.

The federal budget continues to have money for the study of offshore ocean currents. The reason is national defense. The Navy needs information on these currents for the benefit of submarine commanders. Unfortunately for the Great Lakes, the Navy isn't planning any freshwater submarine patrols.

Michigan's Congressional delegation has been instrumental in keeping money available for Great Lakes research. However, a key member of that delegation won't be returning to Congress this term. What that means for future funding is uncertain.

Photos By Bob Pickett



COHO: Can They Survive?

Lake Michigan's Favorite Game Fish Faces Peril From Nature & Man.

By Paul McElroy

Something is happening to the fish in Lake Michigan, particularly the salmon and trout. Anglers have been noticing a reduction in the average size of both chinook and coho salmon caught over the past few years. Is this a natural cycle, or the symptom of a far more serious problem?

Coho Survival

Several years ago, 20 pound coho and 30 pound chinook salmon catches were common. Today, fish this large are the exception rather than the rule. Ten years' results from the annual Michigan American Salmon Derby illustrate the decrease in salmon size (Table 1).

Of course, some big fish of each species are still caught each year. For example, in August last year a 43 pound, 4 ounce chinook was caught off Algoma, WI. That fish set a new state record.

However, each year Lake Michigan's average salmon are becoming progressively smaller. Fish biologists are studying the situation in an effort to determine the cause. Varied opinions and theories have been expressed by both the biologists and fishermen.

Some anglers feel that the forced inbreeding of hatchery-reared salmon causes them to be smaller. They feel that if the salmon were allowed to spawn naturally in streams that the "natural selection process" of nature would yield a larger fish.

It's true that the milt from only a few males is used to fertilize the eggs of many females. It growth rates are determined only by genetics, then it is conceivable that the consistent use of smaller males might be a factor.

Diet during the early stages of development may also play a significant part in salmon growth rates. But, the hatcheries provide the ultimate in controlled environmental conditions,including scientifically formulated feeding programs.

Others claim that the salmon stocked in recent years are of a smaller strain than the original stockings. Consequently, these fish can't be expected to attain the same growth levels as fish planted at the beginning of the salmon program. However, fishery biologists say that current stockings are of the same strain as the original plantings.

Fishermen with more imagination voice the opinion that large salmon are swimming around the lake, but can't be caught because they have become "sensitized" to all of the current lures. These anglers refer to those fish as "nonbiters."

Under this theory, suppose all of the salmon which were susceptible to being caught on a particular lure have been caught on that lure. Because all of these susceptible fish have been caught, they were not able to spawn and creat additional offspring susceptible to that

This theory seems a little far-fetched. If it were true, new lures and colors would have to be introduced each year to catch those salmon that were conditioned not to be caught by the existing lures.

The most likely cause of the salmon downsizing in Lake Michigan lies with the amount of forage fish (smelt and alewives) in the lake for salmon to feed upon. Fishery biologists have indicated that the progressive lowering of the available food levels, primarily alewives, coupled with the high salmon stocking levels may be the keys to the reduced size of salmon.

The amount of forage fish in the lake is not limitless. Despite this fact, state governments continue to stock more and more salmon. Almost 50 million trout and salmon (not including lake trout) were stocked in Lake Michigan from 1980 through 83. (Table II)

During this period, the stocking included 9.3 million coho and 22.2 million chinooks. Natural reproduction of these fish is thought to be about 10 to 15 percent of the total salmonid population.

The amount of time that each species of salmon spends in the lake determines its relative impact upon the forage base. Coho, for example, are kept in the hatchery for 18 months before being released into the lake. They spend another 18 months in the lake before returning to spawn and die.

By contrast, the chinook spends 6 months in the hatchery and three years in the lake before it returns to spawn and die. Thus, the chinook has a much greater impact on the forage base than the coho because it grows to a much larger size and spends twice as much time in the lake.

Other salmonid species, including lake, brown and rainbow trout, also have an impact. These fish do not die after spawning and spend more time in the lake than either coho or chinook salmon. Scientists worry that increased stocking of trout and salmon could exhaust the supply of alewives.

What happens if the alewives are exhausted? The game fish then might begin to prey on commercially valuable fish like chubs, smelt and small perch.

Fish biologists from Great Lakes area universities are touring the sites of salmon fishing derbies. These scientists aren't fishing. Instead, they are rolling up their sleeves and cleaning the anglers' catches. Their only compensation for this work is to be able to keep what they find in the stomachs of the fish.

"Our aim is to find out what salmon and trout in the Great Lakes are eating at different locations and over time," says

James Kitchell a University of Wisconsin ecologist. "Among other things, this may give us an indication of whether these valuable predators are running out of their usual food . . . and that's important."

Studies of stomach contents indicate that salmon prefer to feed on alewives with smelt their second choice. There seems to be little crossover to chubs or perch. Both species are plentiful, but salmon do not tend towards eating them. This lack of adaptability to switch diets may lead to the salmon's demise if the alewife population collapses.

If the population of alewives is driven down to a point so low that they are unable to reproduce themselves, the forage base will totally collapse. With it could go the salmon fishery.

At an early fall meeting last year, the Great Lakes Fishery Commission discussed forage fish in Lake Michigan. Scientists warned that unless planting of predators is curtailed, the stocks of alewife and smelt could be reduced to a dangerously low level.

Photos By Author

Coho Were Introduced To End Alewife Overpopulation. Now, Too Many Coho Could Lead To Disaster For Both Species.

Table I

American Salmon Derby Results Chinook Salmon

Year	Winning Weight	Number Of Fish Over 30 Pounds
1977	[illegible]	[illegible]
1978	[illegible]	[illegible]
1979	[illegible]	[illegible]
1980	[illegible]	[illegible]
1981	[illegible]	[illegible]
1982	[illegible]	[illegible]
1983	[illegible]	[illegible]

Table II

Fish Plantings

Species	1980 Plant	1981 Plant	1982 Plant	1983 Plant
Chinook	[illegible]	[illegible]	[illegible]	[illegible]
Coho	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Ohio Sea Grant

ECONOMIC VALUE OF LAKE ERIE SPORT FISHING TO PRIVATE-BOAT SPORT ANGLERS

Leroy J. Hushak, Ph.D.
Jane M. Winslow, M.S.
Nilima Dutta, M.S.

Department of Agricultural Economics and Rural Sociology
Ohio Agricultural Research and Development Center

OHSU-TS-11
ESS-611

Ohio State University
Sea Grant Program
August 1984

THE ECONOMIC VALUE OF LAKE ERIE SPORT FISHING TO PRIVATE-BOAT SPORT ANGLERS

Sport fishing on Lake Erie has increased substantially since 1975. The creel census conducted by the Ohio Department of Natural Resources shows that hours by sport anglers increased from 7.5 million in 1975 to 13.6 million in 1982. Since the average angler fishes about 7 hours per day, this translates into an increase from about one million days fished in 1975 to about 1.9 million in 1982. Walleye harvested by sport anglers increased from 113,000 in 1975 to over 3,000,000 in 1982. The yellow perch harvest increased from about 8 million in 1975 to over 12 million in 1982.

Since September 1980, three studies have been undertaken to estimate how private-boat sport anglers value various components of the Lake Erie fishery: (1) western basin for May-August 15, 1981, called the walleye sample; (2) western basin for August 15-November 1981, called the yellow perch sample; and (3) central basin for 1982. Excluded are anglers who hire the services of charter firms and shore anglers. Charter angler hours were less than ten percent of private-boat angler hours in 1981.

Descriptive statistics of each sample are presented in Table 1. For each sample, private-boat anglers were contacted at a launching or docking site and asked if they would be willing to complete the questionnaire for the study. If an angler was agreeable, we obtained his or her name and address and mailed a questionnaire at the end of the fishing period. For the walleye sample, the respondents were asked to report western basin fishing activity for May-August 15, 1981. A total of 648 anglers were contacted, of which 350 returned completed questionnaires (Table 1).

The mean age, income and group size for the three samples are similar. Nearly all respondents are male. The average respondent in the walleye sample travels the greatest mean distance (86 miles), stays the longest (1.8 days) and fishes the longest (7.4 hours per day). The average respondent to the central basin sample makes the most trips (28.4), but the respondents are mainly local residents traveling an average of 16.8 miles to fish at a central basin site. In addition to fishing, central basin respondents were asked to include recreational boating time and expenditures for non-fishing activities. The respondents reported spending 1.7 hours per day in recreational boating in addition to the 5.3 hours per day fishing.

TABLE I
DESCRIPTIVE STATISTICS BY SAMPLE

	Walleye 1981	Yellow Perch 1981	Central Basin 1982
Sample Characteristics			
Time Period	May-Aug. 15, 1981	Aug. 15 to Nov. 1981	1982
Sample Size	648	550	730
Useable Responses	350	307	443
Demographics (sample means)			
Age (years)	43.6	45.7	44.5
Income ($)	26,516.0	24,362.0	24,295.0
Group size (no.)	3.1	2.8	3.2
Fishing Effort (sample means)			
Number of Trips	7.9	6.1	28.4
Days per Trip	1.8	1.7	1.1
Hours per Fishing Day	7.4	6.6	5.3
Distance Traveled (miles)	86.3	73.7	16.8
Number of Anglers	67,900.0	31,200.0	21,300.0
Harvest Rates (sample means per person per fishing day)			
Walleye	2.3	0.9	0.02
Yellow Perch	5.3	21.1	2.4
White Bass			0.6

Combining sample data and creel data, we estimate that 67,900 anglers fished during May-August 15, 1981. Given overlap across samples, we estimate that 74,000 to 83,000 private-boat anglers fished in Lake Erie during 1981. The mean harvest per person per day is 2.3 walleye and 5.3 yellow perch in the walleye sample (Table 1).

Research Methodology

The travel cost methodology is used to estimate the value placed on sport fishing by private-boat anglers. The travel cost methodology consists of two steps. First, the travel cost demand curve is estimated. Second, total willingness to pay for Lake Erie sport fishing is derived from the estimated demand curves.

A demand curve shows the relationship between the quantity purchased of a good for some time period and the price of that good, e.g., between ice cream cones purchased per week and the price of ice cream cones. We expect the demand curve to slope downward to the right as shown by line AB in Figure 1. As the price of ice cream cones (P) declines, more cones (Q) will be purchased by each week.

The demand curve for fishing is similar in concept; as the price of fishing trips declines, an angler is expected to make more fishing trips. Unlike ice cream cones, one does not walk into a store and purchase a fishing trip. While fishing equipment is purchased, it is the fishing trip itself that is the appropriate unit of measure for the quantity purchased. The travel cost demand curve methodology obtained its name from the definition of the price of a fishing trip as the costs of traveling to and from the fishing site. In recent work, the costs of fishing are also included as costs of a fishing trip.

Total willingness to pay for sport fishing is derived from the demand curve estimates. Total willingness to pay is the total dollars a sport angler would be willing to spend for Lake Erie fishing rather than go without Lake Erie fishing (in this study for the period and area covered by each sample). Willingness to pay has three components: (1) the costs of traveling to and from the fishing site; (2) the on-site costs of fishing; and, (3) net consumers surplus (Figure 2). In this study, only travel costs are used to determine the price of a fishing trip for estimation of the demand curve. The mean value of on-site costs (a constant) is then added to the price to locate the demand curve at the correct level.

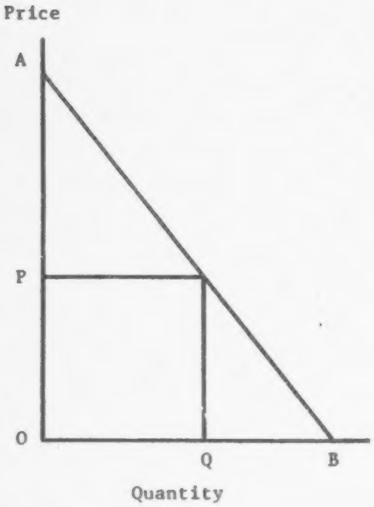

Price
A
P
0
Q
B
Quantity

Figure 1. Demand curve

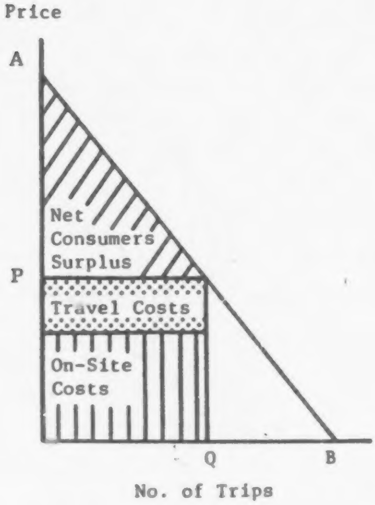

Price
A
Net
Consumers
Surplus
P
Travel Costs
On-Site
Costs
Q
B
No. of Trips

Figure 2. On-site costs, travel costs, and net consumer surplus.

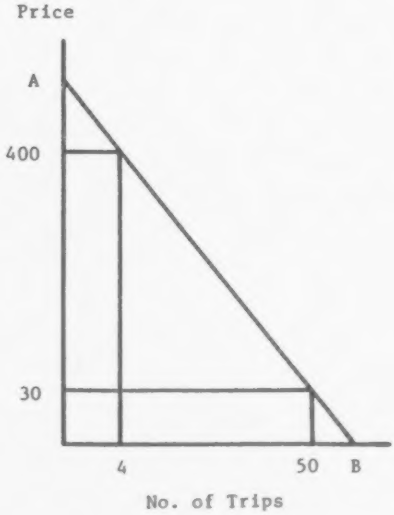

Price
A
400
30
4
50
B
No. of Trips

Figure 3. Effect of proximity to Lake Erie on costs and net consumers surplus

Travel costs and on-site costs each consist of two components: (1) the money costs incurred for travel (vehicle wear and tear and fuel) and for fishing (boat fuel and maintenance, fishing equipment, and bait); and, (2) human time costs. Both travel and fishing are time-consuming activities. Lake Erie sport anglers could be working or participating in other activities (other fishing, hunting, religious, political, etc.) if they were not fishing at Lake Erie. If the person would be working if not fishing at Lake Erie, the value of the human time for sport fishing is the wage rate while working. If the alternative activity is another recreation activity, a religious activity, or other non-work activity, the value of human time is probably less than the wage rate.

In this paper, we present estimates which value human time at zero, 25 and 50 percent of the wage rate implied by reported income. Several studies of commuters suggest that commuting time is valued at 25 to 50 percent of the wage rate. Further, most respondents were male and many of them are heads of households whose fishing groups consist of other family members (spouse and children) whose values of human time are much less than the respondent's wage rate. While it is not possible to determine a precise value of human time while fishing on Lake Erie, it does appear that zero and 50 percent of the wage rate are reasonable lower and upper limits.

Net consumer surplus is the triangular area above the price and below the demand curve in Figure 2. It is the value of Lake Erie fishing to the private-boat sport angler over and above the economic costs (travel and on-site, money and human time). Net consumer surplus must be included in valuing the Lake Erie fishery for two reasons. First, since the Lake Erie fishery is a unique resource, substitute fishing sites which are equally attractive cannot be established, i.e., only imperfect substitutes exist or can be developed. Second, since a significant component of fishing cost is travel cost, we would in many cases conclude that someone traveling 200 miles per trip for four trips per year ($400 x 4), for example, values the Lake Erie fishery more highly than someone traveling ten miles per trip for 50 trips per year ($30 x 50) (Figure 3). This happens because much of the value of fishing to the angler who lives near the lake is captured without cost because of location near the lake.

Results

Estimates of total willingness to pay and each of its components for western basin walleye, western basin yellow perch and the central basin are presented in Tables 2, 3 and 4, respectively. Each table contains estimates with human time valued at zero, 25 and 50 percent of the wage rate, where the estimates are stated per trip, per day and for the appropriate aggregation over angler hours from the Ohio Department of Natural Resources creel surveys.

In Table 2, western basin walleye respondents incur average money travel costs of $15.28 per trip (with human time valued at zero). When human time is valued at 25 percent of the wage rate, travel costs average $21.62 per angler and when human time is valued at 50 percent, travel costs average $34.88 per angler. Money on-site costs have a mean value of $69.60, with human time valued at zero. On-site costs are higher when human time is valued at higher rates. Net consumer surplus increases from $33.98 when human time is valued at zero to $62.06 when human time is valued at 50 percent of the wage rate. The summation of travel costs, on-site costs and net consumer surplus yields total willingness to pay estimates of $118.85, $178.30 and $262.00 per trip when human time is valued at zero, 25 and 50 percent of the wage rate, respectively.

The per day estimates in Table 2 are equal to the per trip estimates divided by 1.8 days per trip (Table 1). When the value of human time is 25 pecent of the wage rate, average total willingness to pay is $96.80 per day. Creel data from the Ohio Department of Natural Resources are used to estimate the aggregate western basin walleye willingness to pay. Total western basin angler hours for May-August 1981 from the creel census come to 8.0 million. Division of angler hours by the sample mean of 7.4 hours per fishing day (Table 1) yields a total of 1,081,075 angler days. Multiplication of the per day estimates of travel costs, on-site costs, net consumer surplus, and willingness to pay by western basin angler days yields the aggregate estimates. The total willingness to pay for, or the total value placed on, western basin summer (walleye) fishing over the May-August 1981 period was $69.16 million, $104.64 million, or $154.91 million when human time is valued at zero, 25 or 50 percent of the respondent's wage rates, respectively.

The estimates for yellow perch fishing for autumn 1981 are presented in Table 3. The per trip and per day estimated values for yellow perch are quite similar to those for the walleye data in Table 2. The aggregate estimates for September-October 1981 are much less because there are fewer angler hours during the autumn period. For September-October 1981, 1.3 million angler hours are reported in the creel census. Division of angler hours by 6.6 hours per fishing day (Table 1) yields an estimated 202,130 angler days. Multiplication of angler days by the per day estimates of travel costs, on-

TABLE 2
ESTIMATED EXPENDITURES, NET CONSUMER SURPLUS AND TOTAL WILLINGNESS TO PAY PER PERSON, WESTERN BASIN WALLEYE, 1981

	Human Time as % of Wage Rate		
	0	25	50
Per Trip			
Number of Trips	7.95	7.95	7.95
Travel Costs ($)	15.28	21.62	34.88
On-Site Costs ($)	69.60	117.33	165.06
Net Consumer Surplus ($)	33.98	39.35	62.06
Willingness to Pay ($)	118.85	178.30	262.00
Per Day			
Travel Costs ($)	8.22	12.58	20.97
On-Site Costs ($)	37.46	63.98	90.49
Net Consumer Surplus ($)	18.29	21.18	33.40
Willingness to Pay ($)	63.97	96.80	142.66
Aggregate Western Basin Walleye May-August 1981			
Travel Costs ($ Mil.)	8.89	12.58	20.97
On-Site Costs ($ Mil.)	40.50	69.16	97.83
Net Consumer Surplus ($ Mil.)	19.77	22.90	36.11
Willingness to Pay ($ Mil.)	69.16	104.64	154.91

TABLE 3
ESTIMATED EXPENDITURES, NET CONSUMER SURPLUS AND TOTAL WILLINGNESS TO PAY PER PERSON, WESTERN BASIN YELLOW PERCH, 1981

	Human Time as % of Wage Rate		
	0	25	50
Per Trip			
Number of Trips	6.26	6.26	6.26
Travel Costs ($)	15.70	23.07	31.01
On-Site Costs ($)	55.49	96.90	138.32
Net Consumer Surplus ($)	39.24	45.86	58.77
Willingness to Pay ($)	110.43	165.83	228.10
Per Day			
Travel Costs ($)	9.24	13.57	18.24
On-Site Costs ($)	32.64	57.00	81.36
Net Consumer Surplus ($)	23.09	26.98	34.57
Willingness to Pay ($)	64.96	97.55	134.17
Aggregate Western Basin Yellow Perch September-October, 1981			
Travel Costs ($ Mil.)	1.87	2.74	3.69
On-Site Costs ($ Mil.)	6.60	11.52	16.45
Net Consumer Surplus ($ Mil.)	4.67	5.45	6.99
Willingness to Pay ($ Mil.)	13.13	19.71	27.12

site costs, net consumer surplus, and willingness to pay yields the aggregate western basin yellow perch estimates. Total willingness to pay for western basin autumn (yellow perch) fishing by private-boat anglers is $13.13 million, $19.71 million or $27.12 million when human time is valued at zero, 25 or 50 percent of the wage rate, respectively.

In Table 4, estimates of travel costs, on-site costs, net consumer surplus and total willingness to pay by private-boat anglers in the central basin for 1982 are presented. These estimates include recreational boating activities other than fishing. In contrast to the western basin, the central basin fishery attracts primarily local residents who travel relatively short distances to fishing sites for single day trips. Total willingness to pay per day ranges from 30 to 60 percent of the willingness to pay for western basin walleye or yellow perch fishing.

The aggregate central basin willingness to pay is estimated at $7.41 million, $18.85 million or $30.40 million when human time is valued at zero, 25 or 50 percent of the wage rate, respectively. These estimates are based on the 1982 creel census report of 2.1 million angler hours divided by 5.3 hours per fishing day (Table 1). These values overestimate the willingness to pay for the central basin fishery because they include non-fishing activities. Whether they over- or underestimate the value of total recreational boating depends on whether recreational boating other than fishing is over- or under-represented in the sample.

Conclusion

If we sum the aggregate total willingness to pay estimates for the three fishery components, the total willingness to pay is $89.7 million when time spent traveling to and fishing in Lake Erie is valued at zero percent of the wage rate, $143.2 million at 25 percent, and $212.4 million at 50 percent. If we adjust the central basin estimates to reflect the 1.6 million angler hours estimated for 1981 rather than the 2.1 million for 1982, the respective estimates are $87.9 million, $138.7 million and $205.2 million, an estimate which uses 1981 creel census data in total. While it is not possible to make a precise estimate, it appears that these components of the Lake Erie fishery, over 90 percent of the 1981 angler hours, were valued by sport anglers at $140 million to $200 million in 1981.

In generating these values, private-boat sport anglers made total money

1 of Tables 2, 3 and 4). The balance of the value of Lake Erie sport fishing is composed of the value of human time and net consumers surplus. If we accept the $140 million to $200 million range as containing the true value of the Lake Erie fishery, then human time and net consumers surplus comprise 54 to 68 percent of the economic value of private-boat sport fishing on Lake Erie.

Ohio Sea Grant

ECONOMIC IMPACT OF LAKE ERIE ON NORTHERN OHIO

LEROY J. HUSHAK, Ph.D.
KOFI K. APRAKU, Ph.D.
GEORGE W. MORSE, Ph.D.

Department of Agricultural Economics and Rural Sociology
The Ohio Agricultural Research and Development Center

OHSU-TS-[illegible]
[illegible]

Ohio State University
Sea Grant Program

ECONOMIC IMPACT OF LAKE ERIE ON NORTHERN OHIO*

Walleye harvested by sport anglers from the Western Basin of Lake Erie increased from about 100,000 fish in 1975 to over 3,000,000 in 1982. The total days fished increased from about one million to 1.8 million between 1975 and 1982. These and other recent changes in Lake Erie resources justify a study of the economic impact of Lake Erie. This paper summarizes the results of a recent Sea Grant study in which the economic impacts of Lake Erie on northern Ohio were estimated for 1978. First, the total economic impact of Lake Erie economic sectors is presented. Second, the total economic impact of sport fishing is discussed. Finally, the economic impacts of changes in the allocation of the Lake Erie fishery between sport and commercial fishing is analyzed.

In this study, northern Ohio consists of the 17 county regional economy most highly impacted by Lake Erie: Ashtabula, Cuyahoga, Erie, Geauga, Huron, Lake, Lorain, Lucas, Mahoning, Medina, Ottawa, Sandusky, Seneca, Summit, Trumbull, Portage and Wood counties. In 1978, these 17 counties generated output of $150 billion, income of $31 billion and employment of 1.7 million man-years. The output, income and employment generated directly by Lake Erie economic sectors are less than one percent of these totals. However, the importance of economic development in Ohio, the growth potential of Lake Erie sectors as compared to many of the heavy industry sectors in this region, and the growing importance of recreational activities in Ohio, in particular sport fishing on Lake Erie, justify studying the economic impact of Lake Erie.

---

* The study underlying this paper is the unpublished Ph.D. dissertation of Kofi Konadu Apraku entitled, "Economic Impact of the Lake Erie Fishery and Other Lake Erie Industries: An Input-Output Model of the Northern Ohio Regional Economy," The Ohio State University, 1985. The study was directed by Leroy J. Hushak, Professor of Agricultural Economics at the Ohio Agricultural Research and Development Center at The Ohio State University. Salaries and research support was provided by state and federal funds appropriated to the Ohio Sea Grant Program and to the Ohio Agricultural Research and Development Program, The Ohio State University.

Methodology

A 65-sector, open, single region, static input-output (I/O) model is the methodological basis of the study. The 1977 U.S. National I/O model updated to 1978 prices was used to derive 65 sectors of the regional model. The highly disaggregated 537 sector national model was adapted to reflect the size and structure of the region's economy. Data for marina and boat sales and charter fishing were developed from primary survey responses. Commercial fishing data was adapted from another I/O study of commercial fishing.

Six of the 65 sectors in the I/O model were considered as Lake Erie economic sectors: commercial fishing, charter fishing, water transportation, mineral extraction, marina and boat sales, and other Lake Erie recreation. Other Lake Erie recreation was part of the amusement and recreation sector in the regional I/O model; it was not a separate sector. Examination of employment data suggested that ten percent of amusement and recreation could be attributed to Lake Erie. This includes activities such as Cedar Point, recreational boating other than fishing, and recreational activities on the islands. Other Lake Erie recreation is ten percent of the amusement and recreation sector from the I/O model.

Sport fishing is not an economic sector. Sport fishing generates its economic impact through the purchase of output from Lake Erie sectors and other sectors in the regional economy.

Results

In 1978, the six Lake Erie economic sectors generated $412.5 million of output, $110.1 million of income, and 8,877 man-years of employment. These are the total direct effects shown in Table 1. In producing their output, these six sectors purchase inputs from other economic sectors in the region, generating increased output in the other sectors; these are the indirect or multiplier effects. The direct plus indirect effects, or the direct effects times the sectoral multipliers, are the total economic impacts. The six Lake Erie sectors generated total economic impacts of $675.7 million of output, $211.3 million of income and 12,312 man-years of employment in 1978 (Table 1).

The contribution of each sector to the total economic impact is also shown in Table 1. Water transportation makes the largest estimated contribution to output (42.5 percent) and income (46.1 percent), while marina and boat sales make the largest contribution to employment (37.2 percent). The two smallest sectors are commercial fishing and charter fishing.

The estimated total economic impact of sport fishing in 1978 is shown in Table 2. These estimates include private-boat and charter fishing, but exclude shore fishing. In part these estimates overlap those in Table 1 because the economic impact through marina and boat dealers and charter fishing is part of that estimated in Table 1. However, sport anglers also make expenditures in economic sectors other than Lake Erie sectors. These impacts are also reported in Table 2.

The economic impact of sport fishing occurs through expenditures made by sport anglers in the regional economy. The total direct effect (spending) of private-boat and charter anglers in 1978 was estimated at $28.7 million. The total (direct plus indirect) economic impact of this expenditure was $52.2

TABLE 1

OUTPUT, INCOME AND EMPLOYMENT IMPACTS OF LAKE ERIE SECTORS, 1978

	Output $ million	Income $ million	Employment man-years
Total Direct Effect	412.5	110.1	8,877
Total Economic Impact	675.7	211.3	12,312
		Contribution by Sector	
	%	%	%
Commercial Fishing	1.5	0.5	0.8
Charter Fishing	0.7	0.7	1.0
Water Transportation	42.5	46.1	30.1
Mineral Extraction	22.9	18.8	15.0
Marina and Boat Sales	20.5	27.1	37.2
Other Lake Erie Recreation	12.0	6.7	15.8

TABLE 2

ECONOMIC IMPACT OF LAKE ERIE SPORT FISHING, 1978

Sectors	Direct Effect $ Million	Total Economic Impact Output $ Million	 Income $ Million	 Employment Man-Years
Total	28.74	52.23	18.32	1,616.05
		Contribution by Sector		
	%	%	%	%
Marina and Boat Sales	52.9	55.9	65.6	59.4
Boat, Ship Building Repair	4.5	5.1	5.8	2.5
Charter Fishing	7.1	8.8	8.2	7.6
Eat and Drink	12.2	11.9	3.3	6.4
Retail	17.6	13.1	14.4	19.5
Hotel and Lodging	5.0	4.6	2.5	4.2
Miscellaneous Services	0.7	0.6	0.2	0.5

million of output, $18.3 million of income and 1616 man-years of employment. Over 50 percent of the economic impact of sport fishing on Lake Erie is through the marina and boat sales sector. Charter fishing contributes about nine percent of these estimated impacts, and private-boat fishing 91 percent.

Based on the I/O model and the 1978 allocation of the Lake Erie fishery between commercial and sport fishing, the reallocation of $1 million of fish from commercial to sport fishing would result in a reduced total economic impact from commercial fishing of $3.9 million of output, $0.4 million of income and 41.4 man-years of employment (Table 3). If the reallocation generated no additional spending by sport anglers, the region would lose the decrease in commercial expenditures, the lower bound of the estimated net economic impacts in column three of Table 3. If sport angler spending, the direct effect, changes in proportion to the reallocation of fish, the estimated increase in total economic impact from sport fishing is $8.2 million of output, $2.9 million of income and 252 man-years of employment. Under this assumption, then the net economic impacts of a reallocation of $1 million of fish from commercial to sport fishing are the upper bounds of the estimates shown in column three of Table 3.

While it is likely that commercial fishing expenditures will change in approximate proportion to the value of fish harvest, it is less likely that sport angler expenditures will change (particularly increase) proportionately. The reallocation would only make additional yellow perch and white bass available to sport anglers since the commercial industry in Ohio is not allowed to harvest walleye. Since over 70 percent of sport angler expenditures are for summer walleye fishing, it is not clear how much additional expenditure would be generated by the reallocation of yellow perch

TABLE 3

NET ECONOMIC IMPACT OF THE REALLOCATION OF $1 MILLION OF FISH FROM COMMERCIAL TO SPORT FISHING, 1978

	Total Economic Impacts		
	Commercial Fishing Expected Decrease	Sport Fishing Expected Increase	Net Economic Impact
Output ($ Million)	3.9	8.2	-3.9 to 4.2
Income ($ Million)	0.4	2.9	-0.4 to 2.4
Employment (Man-Years)	41.4	252.1	-41.4 to 210.7

and white bass to sport fishing. For the region to break even from this reallocation, sport angler expenditures must increase by at least 48 percent of the proportional increase assumption which generated the total economic impacts from sport fishing in column two of Table 3.

Conclusion

In conclusion, the total economic impact of Lake Erie on this 17 county regional economy is small when measured by this standard, However, the economic sectors of Lake Erie contain a vital link between Ohio and international water transportation and form the basis for a large recreation industry which has been growing rapidly in recent years with the return of large walleye populations. The results of the model support past reallocations of the Lake Erie fishery from commercial to sport fishing. When the remaining species to be reallocated are examined, caution about further reallocations from commercial to sport is needed because sport anglers might not increase effort to harvest additional yellow perch or white bass. Continued monitoring of the response of sport anglers to change in the availability of these species is vital to future allocation decisions.

THE ECONOMIC VALUE OF RECREATIONAL BOATING OF LAKE ERIE

by

Kenneth A. Wenner
Division of Parks and Recreation Administration
School of Natural Resources
The Ohio State University

In cooperation with
Ohio Agricultural Research and Development Center
Wooster, Ohio
Lake Erie Marine Trades Association
Cleveland, Ohio
and
The Ohio Sea Grant Program
Center for Lake Erie Area Research
The Ohio State University

December 1982

INTRODUCTION

One of the concerns related to the establishment of a new recreational facility or the expansion of an existing one is the economic importance of that facility to the community. The addition or loss of an existing business can mean a change in the local tax base and payroll. The degree or magnitude of these changes is of vital importance to community planners and developers.

The purpose of this report is to present in detail the results of a study which sought to determine the economic value of a recreational boating business and identify the major source of gross income and major expenditure items. A recreational boating business was defined as any establishment providing recreational boating supplies and/or services. This study includes both privately and publicly owned facilities, and private clubs providing services for their members. Sales by department stores and local hardware stores were not included in the study. The data presented are from businesses located in the eight Ohio counties bordering Lake Erie and are compared to independently conducted studies in Wisconsin (Meltz 1979) and Illinois (Espeseth 1980). These data should be indicative of marinas on or near all the Great Lakes, large reservoirs, major rivers and intercoastal waterways and bays.

Information presented in this paper can be utilized by local communities to help weigh the economic advantages of a marina business in a community as compared to the cost of the services needed by that business to satisfy the needs of their customers.

STUDY METHODS

A total of 237 boating businesses were known to exist in the eight Ohio counties bordering Lake Erie in 1980. Questionnaires were mailed to each of these businesses and a total of 99 usable questionnaires was returned. This constitutes a 42 percent return rate.

Each business establishment was assured there were no identification marks on the questionnaire that could identify the business and that all data would be aggregated. Adherence to this "no-identification promise" negated the possibility of following up non-respondents for a complete statistical analysis.

RESULTS

GROSS INCOME

The gross income levels listed in Table 1 indicate that the responding establishments varied considerably in size and gross volume of the business. Twenty-four percent of the establishments grossed under $25,000. Personal interviews conducted with several low gross volume operations indicate these units, for the most part, represented small family-owned units operated on a part-time basis. The small-establishment owner usually owned another business or was employed in another establishment and only worked the marina evenings and weekends. The services offered by the small establishments generally consisted of a few docks available for rent. Other establishments included in the business volume category under $25,000 are many of the small clubs. Their "businesses" consisted of a few docks and/or a boat ramp supported in part by dues and volunteer work by members.

In contrast to these small operations are large clubs and incorporated businesses. Large clubs may have had several hundred docks, yearly storage facilities, boating supplies, large hoists, a multi-functional clubhouse and generally had a much higher gross income. Eighteen percent of the incorporated businesses contacted during this study reported a gross income of over $1 million while 7 percent of these grossed over $2 million. These larger establishments represented incorporated businesses which offered a full line of services and supplies, and sold new and used boats.

The wide range in gross income levels from under $25,000 to over $1 million creates a high standard deviation when computing averages for the various income and expenditure categories. To reduce the standard deviations listed in several of the following tables the data could be analyzed by gross income classes. However, such an analysis strategy could lead to the possibility of identifying individual business establishments. In order to prevent any such identification, all the data were aggregated and the unusually large standard deviations were listed in parentheses to alert the reader.

TABLE 1

GROSS INCOME LEVEL FOR 99 LAKE ERIE BOATING BUSINESSES

Income Level (in dollars)	Percentage of Respondents
0- 25,000	24
25,000- 99,999	22
100,000-299,999	19
300,000-699,999	11
700,000-999,999	4
1,000,000 -	18

Table 2 lists the gross income for all 99 respondents by: (1) ownership type (club or commercial); (2) whether or not the business has direct access to Lake Erie; and (3) whether or not the business bought or sold boats. Included in Table 2 is a list of the major sources of income and the approximate percentage that each source contributed to the total gross income. The data in Table 2 indicate that commercial businesses had an average income of $650,000 and private clubs averaged $130,882. Espeseth

TABLE 2

*GROSS INCOME FROM 99 LAKE ERIE AREA RECREATIONAL BOATING ESTABLISHMENTS AND PERCENTAGE OF INCOME CONTRIBUTED BY EACH MAJOR ITEM**

	OWNERSHIP TYPE		LAKE ERIE ACCESS		BUY - SELL BOATS	
	Club	Commercial	Yes	No	Yes	No
NUMBER OF RESPONDENTS	17	82	81	18	56	43
GROSS PER BUSINESS (in dollars)	130,882 (228,151)**	650,182 (1,023,104)	518,025 (868,350)	754,444 (1,289,561)	899,375 (1,147,006)	120,349 (223,790)
			PERCENTAGE OF INCOME			
ITEMS						
Slip rentals***	46.0	22.0	30.0	10.5	13.5	43.0
Storage	6.5	7.0	7.0	6.5	6.5	7.0
Maintenance & Repair	-	11.0	8.5	11.0	11.0	6.0
Boat Sales	-	30.0	20.0	48.0	44.0	0.0
Titles, etc.	3.5	0.5	1.0	-	1.5	-
Utilities	0.5	-	0.5	0.0	-	1.0
Pumpouts	-	-	-	0.0	-	-
Fuel Sales	5.5	6.0	6.5	2.0	4.5	7.5
Supplies Groc., bar	7.0	12.0	10.5	14.0	11.5	11.0
Other	15.5	6.0	8.0	8.0	1.5	16.0

**Average gross income for all reporting businesses was $561,010 with a standard deviation of $955,202.*

***Figures in parentheses indicate standard deviations.*

****Slip rentals include income from launching and hoisting fees.*

- Indicates a value less than 0.5%.

(1980) reported the median gross income for marinas in an Illinois study conducted in 1979 was $300,000. He reported there was wide range in the gross income and therefore elected to report the median income in lieu of the average income. This study included small inland lakes and river marinas as well as large Great Lake marinas.

The highest average gross income category was attained by the ownership class that bought and sold boats. Businesses in this group had an average gross income seven times greater than businesses which offered only docking, services and supplies. On a national scale, new boat sales dropped from 448,000 in 1973 to a low of 322,000 in 1979 (Sciulla 1981). This drop may be an indication that boaters are keeping their boats longer instead of trading them in every few years. Sciulla reported that large boat owners are increasing the use of their boats as a second home -- a type of vacation cabin -- while the boat is tied to the dock. Less actual running of the boat may increase the overall life of the engine and thereby have a long-run tendency to reduce boat sales. If the decreased boat sales trend continues, businesses that rely heavily on boat sales as their major income source may lose gross income.

INCOME SOURCE

Private clubs received nearly 50 percent of their income from dock or slip rentals and 13.5 percent from selling supplies and providing storage and hoisting. An "other" category accounted for 15.5 percent of the total income. This category consisted mainly of membership dues. Meltz (1979) reported that membership dues accounted for 18-24 percent of the gross income of private clubs surveyed in Wisconsin while slip rentals accounted for up to 30 percent of the gross. These findings seem to indicate that clubs, for the most part, provide a mooring and docking service for their members and rely on membership dues as a major source of income.

Responding commercial boating businesses as a group received 30 percent of their income from boat, trailer, and motor sales, 22 percent from slip rentals and 12 percent from supply sales. Further analyses of the data indicate commercial businesses buying and selling boats received 44 percent of their gross income from boat, trailer and motor sales. This compares to 43 percent of gross income from slip rentals for marinas not selling boats. Meltz (1979) reported that marinas buying and selling boats in Wisconsin received 50 percent of their income from boat sales and those not selling boats received 46 percent of their income from slip rentals. These studies indicate that many marinas rely either on boat sales or slip rentals as a major portion of their income. For those marinas having boat sales and slip rentals, the large volume of money from boat sales overshadows the gross income from slip rentals in terms of percent of gross sales. The data does not imply that the margin of profit is substantially different between marinas that have boat sales and those that have mainly slip or storage rentals, but rather that a larger volume of money is handled in the buying and selling of boats than in the providing of slip or storage rentals.

GROSS EXPENDITURES

Table 3 lists the gross expenditures for all 99 respondents by: (1) ownership type (club or commercial); (2) whether or not the business has direct access to Lake Erie; and (3) whether or not the business buys and sells boats. Also included in Table 3 is a list of major expenditure items and the approximated percentage that each item contributed to the gross.

Gross expenditures totaled $44,715,024 and averaged $451,667 per reporting business. These figures do not include taxes and payroll amounts. A comparison of the commercial and the club facilities indicates the margin between gross expenditure and gross income allowed for an average of 24 to 25 percent from which to pay taxes and employees, and for a margin of profit for the commercial facilities.

EXPENDITURE ITEMS

Both facilities which have direct access to Lake Erie and those which do not spent approximately 15 percent of their total expenditures on maintenance of various types. Those facilities having direct access to Lake Erie spent approximately two percent more on site maintenance but two percent less for general maintenance than facilities not having direct access. Increased site maintenance costs may be the result of maintaining docks which incur ice or wave damage.

Private clubs spent 26.5 percent or more than one-fourth of all their expenditures on various types of maintenance. This compares to an average commercial expenditure of 12.5 percent. In Wisconsin, Meltz (1979) reported clubs spent up to 22.5 percent of their gross expenses on maintenance while commercial marinas spent up to 10.8 percent. Variability within the data could account for the small percentage difference between the two states.

TABLE 3

*GROSS EXPENDITURES FOR 99 LAKE ERIE RECREATIONAL BOATING ESTABLISHMENTS AND AVERAGE PERCENTAGE OF EACH MAJOR EXPENDITURE ITEM**

	OWNERSHIP TYPE		LAKE ERIE ACCESS		BUY - SELL BOATS	
	Club	Commercial	Yes	No	Yes	No
NUMBER OF RESPONDENTS	17	82	81	18	56	43
GROSS EXPENDITURES (in dollars)	120,588 (207,098)	520,308 (971,650)	409,753 (818,399)	840,278 (1,213,735)	644,445 (985,993)	200,501 (709,554)
PERCENTAGE OF GROSS EXPENDITURES						
ITEMS						
Rent/Mortgage	6.5	10.0	10.0	8.5	7.5	12.0
Boat Sales	4.5	21.5	16.0	28.5	32.5	-
Advertisements	-	3.0	2.5	1.8	4.0	0.5
Equipment Maintenance	15.5	7.5	8.5	10.5	6.5	12.0
Insurance	2.0	3,5	3.5	3.5	3.0	3.5
New Construction	7.5	4.0	4.5	5.0	3,0	7.0
Site Maintenance	11.0	5.0	6.5	4.5	4:5	8.5
Fuel	8.5	4.5	5.5	4.0	3.0	8.0
Supplies	6.5	7.5	8.0	3.5	6.5	8.5
Utilities	5.5	4.0	4.0	4.0	3.0	5.5
Other	7.0	4.4	5.0	5.5	2.0	8.5
TAXES (in dollars)	4,560 (7,819)	17,781 (51,425)	NA	NA	NA	NA

Average Gross per Business = $451,667 ($980,161). Average Employee Payroll per Business = $68,513 ($145,762). Average Taxes Paid per Business = $15,551 ($47,177).

**All figures in parentheses are standard deviations.*
***All figures are averages per business.*
- Indicates value less than 0.5%.

The difference in maintenance expenditures between clubs and commercial marinas may be due to the higher percentage of total club business involved in docking, mooring and hoisting. Facilities which accommodate these types of services require a high level of maintenance.

Approximately 32.5 percent or nearly one-third of the gross expenditures of commercial facilities that buy and sell boats are involved in boat, motor and trailer purchases. These same type of facilities receive 44 percent of their gross income (Table 2) from the sale of those items. This indicates an average margin of profit of approximately 11 to 12 percent for this activity. Rent, mortgage and new construction accounted for 14 percent of total expenditures for both club and commercially owned facilities.

PAYROLL

The responding businesses reported they had a total payroll of $6,782,788 in 1979. This averages to $68,513 per business. The payroll included 833 full-time and 28 part-time employees. Espeseth (1980) reported that marinas in Illinois spent an average of 19 percent of their gross income for payroll as compared to an average of 12 percent found in this study. The figures reported in the Lake Erie study include both club and commercial facilities which could account for the six to eight percent difference between the two

TABLE 4

AVERAGE CITY, COUNTY, STATE, AND FEDERAL TAXES PAID BY THE RESPONDING BOATING BUSINESSES IN 1979

	CLUB		COMMERCIAL	
	Sum	Average	Sum	Average
Number of Respondents	17		82	
City Taxes*	5,987	352 (1,013)	298,428	3,639 (22,432)
County Taxes	33,171	1,951 (3,457)	163,441	1,993 (4,427)
State Taxes	23,961	1,409 (4,378)	451,737	5,509 (18,819)
Federal Taxes	14,405	347 (2,223)	544,444	6,640 (28,332)

**All taxes are shown in dollars.*
***Figures in parentheses indicate standard deviations.*

studies. Many small clubs reported very few or no full-time employees. A few clubs indicated they relied on volunteer work from their members in order to keep their overall club costs to a minimum. Small businesses (under $25,000) did not report a payroll; apparently the small business entrepreneurs did not consider their personal labors as a cost.

TAXES

The 99 recreational boating businesses responding to this study indicated they spent between 3.5 and 4.5 percent of their total gross income on taxes. This compares very favorably with the 3.6 percent as reported by Espeseth (1980) in Illinois. The percent figures for this Lake Erie study were approximately the same for club-owned and commercially owned facilities. The total amount of taxes reported in 1979 was $1,535,565. This averages to $15,511 per facility.

Table 4 shows the amount of different types of taxes paid by boating businesses according to club or commercial ownership. Commercial businesses made higher average tax payments to all four levels of government than did clubs. This is consistent with the volume of business conducted by clubs versus commercial establishments.

The very high standard deviations for commercial facilities are probably due to several reasons. One is the range in total volume of business conducted by commercial facilities. Another is the geographic location and corresponding tax rate. The highest deviation occurs in the amount of city taxes paid; several respondent facilities are located in unincorporated areas and do not pay city taxes.

CONCLUSION

The boating businesses that were surveyed, both clubs and commercial establishments, indicated they had a combined average gross income of $561,000, paid a total of $15,511 in taxes, and had a payroll of $68,513 per business. Assuming these figures were representative of all 237 known recreational boating businesses in the eight Ohio county Lake Erie area in 1979, the projected figures for the region would be:

total gross income to the area..$132,959,393
total payroll for the area......$ 16,237,581
total taxes paid in the area....$ 3,676,107

The above projected payroll and employee data indicate a total employment of approximately 1,994 full-time employees and 67 part-time employees.

The average income and expenditures data presented in the tables have very high standard deviations and for that reason the figures should not be utilized to say that a marina in an area will account for a given amount of money being added to the area. A suggested procedure for estimating the value of a proposed marina would be to estimate the anticipated gross income of the marina and multiply the gross by the expenditure item percent. For example, if a marina anticipated a gross income of $500,000 then the projected total taxes to be collected could be anticipated to be three to four percent of the gross or between $15,000 and $20,000 per year. It must be remembered that these figures represent estimates and are appropriate only for approximation purposes.

These results should benefit community planning and development in the vicinity of large lakes or reservoirs. State and local officials can use the data to evaluate the cost of services to businesses versus their return to the community. Marina owners and managers can use the data to help make decisions regarding their business expansion.

It is apparent that the Lake Erie boating business has an important economic value and economic impact on the local economy. The boating industry has a large gross income and contributes substantially to both the tax base and the labor force in the eight county area in Ohio. Both local and state public officials and citizens should work cooperatively to insure the continued existence of this vital industry.

REFERENCES

Espeseth, Robert D. 1980. Marina Rate Structure. Office of Recreation and Park Resources, Department of Leisure Studies, Cooperative Extension Service, University of Illinois at Urbana-Champaign. ORPR-51.

Meltz, David, et. al. 1979. Survey of Wisconsin Great Lakes Marinas. Recreation Resources Center, University of Wisconsin: Extension, Madison, Wisconsin.

Sciulla, Michael G. 1981. Outlook for Recreational Boating. Water Based Recreation. Trends. Vol. 18, No. 1, pp. 29-30. National Recreation and Park Association, Arlington, Virginia.

THE VALUE OF RECREATIONAL BOATING AND FISHING IN THE CENTRAL BASIN OF OHIO'S PORTION OF LAKE ERIE

A Thesis

Presented in Partial Fulfillment of the Requirements
for the Degree of Master of Science

by

Nilima Dutta, L.L.M.

The Ohio State University
1984

Approved by

Leroy J. Hushak
Adviser
Department of Agricultural Economics
and Rural Sociology

ABSTRACT

The demand for recreational boating and fishing in the Central Basin of Ohio's portion of Lake Erie is estimated using the individual travel cost model. The data for this study was provided by a sample of 443 recreational boaters and anglers who visited the Central Basin during 1982. Two approaches are used in estimating the travel cost model. One considers that the Central Basin is comprised of a group of four distinct substitute sites and estimates demand functions for each site. The other estimates a single demand function for the entire Central Basin.

The travel cost model is estimated using three alternative costs of travel time. These are travel money costs with zero cost of travel time to which are added travel time costs valued at 25% and 50% of the wage rate. On-site money and time costs are added to the consumer surplus estimates from the demand functions.

The economic value of the recreational activities is derived by combining the consumer surplus estimates and creel census data on fishing efforts in the Central Basin during 1982. This value varies according to the composition of the cost variable in the demand equation. When travel money and time costs are used, the economic values range from $2.11 million to $5.42 million. With the addition of on-site time and money costs to the consumer surplus estimates derived from the demand functions, these values range from $7.39 million to $30.39 million. Inclusion of on-site time and money costs directly in the demand functions yields values which range from $47.07 million to $116.26 million. Empirical results suggest that the best estimate is obtained when the cost of travel time is valued at 25% of the wage rate. Based on this estimate, the economic value of recreational boating and fishing in the Central Basin is approximated as $18.84 million.

OSU
The Ohio State University
Cooperative Extension Service

Area Extension Agent - Sea Grant
Ohio Cooperative Extension Service
Fremont Area Extension Center
1401 Walter Avenue
Fremont, Ohio 43420
(419) 332-1594

WHERE DO CHARTER CLIENTS SPEND THEIR MONEY IN THE LAKE ERIE REGION?

In 1978, charter clients spent considerable money for goods and services beyond the charter fees they paid. Output multipliers show the economic interactions with other industries in northern Ohio, indicating that the economic benefits to Ohio from charter fishing are substantial. Output can be considered to mean the total value to the regional economy.

Sector	Direct Spending ($Millions)	Output Multiplier	Output ($Millions)
Charter fishing	1.83	2.24	4.09
Food and drink	0.10	1.77	0.18
Retail	0.16	1.35	0.22
Hotel, lodging	0.04	1.67	0.07
Misc. services	0.01	1.74	0.02
Marina, boat dealers	0.01	1.92	0.02
TOTAL	2.15		4.60

In 1978, Ohio had 73 licensed charter captains on Lake Erie. 1983 saw about 566 Ohio licensed Lake Erie guides-7.75 times the number licensed five years earlier. If captains received about the same average income per year in 1978 and 1983, (average rates and other expenses have risen) the 1983 levels of direct spending by clients and output to the economy could be as much as 7.75 times as high as reported in the above chart.

Adapted from:

Apraku, K. 1983. Economic impact of the Lake Erie fishery and other Lake Erie industries: an input-output model of the northern Ohio regional economy. Ph.D. Diss., OSU pp.98,163.

Ohio Sea Grant Program - a cooperative venture of The Ohio State University, Ohio Department of Natural Resources, Ohio Department of Education, United States Department of Agriculture and the National Oceanic and Atmospheric Administration of the Department of Commerce.

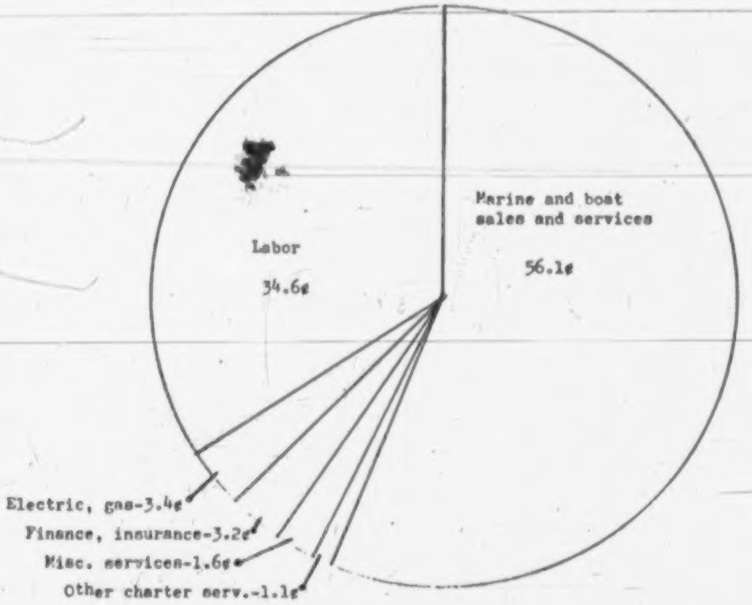
College of Agriculture and Home Economics of The Ohio State University, United States Department of Agriculture and County Commissioners Cooperating

OSU
The Ohio State University
Cooperative Extension Service

Area Extension Agent - Sea Grant
Ohio Cooperative Extension Service
Fremont Area Extension Center
1401 Walter Avenue
Fremont, Ohio 43420
(419) 332-1594

WHERE DOES YOUR MONEY GO? (charter capts)

Marine and boat sales and services and labor were a charter captain's biggest expenses in 1978. Each expense dollar bought:



Adapted from: Apraku, K. 1983. Economic impact of the Lake Erie fishery and other Lake Erie industries: an input-output model of the northern Ohio regional economy. Ph. D. Dissertation, The Ohio State Univ. pp. 252,253.

Ohio Sea Grant Program - a cooperative venture of The Ohio State University, Ohio Department of Natural Resources, Ohio Department of Education, United States Department of Agriculture and the National Oceanic and Atmospheric Administration of the Department of Commerce.

College of Agriculture and Home Economics of The Ohio State University, United States Department of Agriculture and County Commissioners Cooperating

OSU
The Ohio State University
Cooperative Extension Service

Area Extension Agent - Sea Grant
Ohio Cooperative Extension Service
Fremont Area Extension Center
1401 Walter Avenue
Fremont, Ohio 43420
(419) 332-1594

WHO BENEFITS FROM CHARTER FISHING?

Charter fishing has a great deal of economic interaction with other industries in northern Ohio. In 1978, each $100.00 of demand for charter fishing caused the following corresponding increases in spending in other industries in a 17-county region.

Charter fishing	$101.31
Marine dealers	70.53
Miscellaneous services	14.65
Finance and Insurance	8.10
Electric, gas, sanitary	6.60
Boat and shipbuilding	5.11
Real estate	3.97
Construction	3.50
Chemical and allied products	1.37
Iron / steel manufacturing	1.27
Wholesale	.94
Other machinery	.79
Electrical, electronics	.62
Heat, plumbing	.55
Other transportation	.54
Food and drink	.52
Nonferrous metal	.44
Stone, clay, glass products	.40
Communication	.36
Other fabrication	.26
Auto Service.	.25
Retail	.23
Rubber and leather	.23
Mines - other	.21
Machinery - high tech	.21
Paper and allied products	.20
Food products	.18
Wood and lumber	.14
Textiles	.12
Motor vehicle equipment	.11
Other manufacturing	.08
Furniture and fixtures	.07
Hotel, lodging	.06
Water transportation	.04
Crops	.03
Forestry products	.03

Ohio Sea Grant Program - a cooperative venture of The Ohio State University, Ohio Department of Natural Resources, Ohio Department of Education, United States Department of Agriculture and the National Oceanic and Atmospheric Administration of the Department of Commerce.

College of Agriculture and Home Economics of The Ohio State University, United States Department of Agriculture and County Commissioners Cooperating

Benefits p. 2

Printing and publishing	.03
Recreation and amusement	.03
Mineral extraction	.02
Livestock	.01
Education service	.01
Health service	.01
	$224.13

Adapted from:

Apraku, K. 1983. Economic impact of the Lake Erie fishery and other Lake Erie industries: an input-output model of the northern Ohio regional economy. Ph. D. Dissertation, The Ohio State Univ. pp. 137-138.

OSU

Cooperative Extension Service
The Ohio State University

Northwest Extension District
Sea Grant Office
Building 3, Room 12
Camp Perry
Port Clinton, OH 43452
419-635-4417

WHO BENEFITS FROM MARINAS AND BOAT DEALERS?

Marina & Boat Dealers have a great deal of economic interaction with other industries in northern Ohio. In 1978, each $100.00 of demand within marina and boat dealers caused the following corresponding increases in spending in other industries in a 17-county region.

Marina and boat dealers	$124.30
Miscellaneous service	21.10
Boat and shipbuilding	9.00
Finance and insurance	6.90
Real estate	6.40
Construction	4.80
Electric, gas and sanitary serv.	3.90
Primary iron steel manufacturing	2.13
Chemical and allied products	1.62
Other machinery	1.32
Wholesale	1.30
Electrical, electronics	.98
Heat, plumbing	.88
Other transportation	.72
Primary nonferrous metal	.70
Eat and drink	.65
Stone, clay and glass products	.59
Communication	.42
Other fabrication	.41
Printing and publishing	.41
Machinery-high tech	.34
Rubber and leather	.32
Retail	.31
Auto service	.31
Charter fishing	.27
Paper & allied products	.25
Motor vehicle equipment	.15
Mine - other	.14
Furniture and fixtures	.13
Other manufacturing	.11
Hotel, lodging	.08
Water transportation	.05
Crops	.05
Forestry products	.05
Recreation and amusement	.04
Mineral extraction	.02
Livestock	.02

continued ....

College of Agriculture and Home Economics of The Ohio State University and The United States Department of Agriculture Cooperating

Benefits pg. 2

Food and kindred products	.02
Wood and lumber	.02
Education service	.02
Textiles	.01
Health service	.01
	$191.25

Adapted from:

Apraku, K. 1983. Economic impact of the Lake Erie fishery and other Lake Erie industries: an input-output model of the northern Ohio regional economy. Ph. D. Dissertation, The Ohio State Univ. pp. 137-138.

Senator **Kasten**. Let me further develop the point that you were just making.

We've got a number of different States, as you pointed out; 2 different countries; a number of different lakes, and then you take the governmental agencies and it turns out that there are over 20 different governmental agencies in Washington, DC, that have one thing or another to do with the Great Lakes. They include the Environmental Protection Agency, the National Oceanographic and Atmospheric Administration, the Corps of Engineers, the National Sea Grant Program, the Office of Coastal Zone Management, the International Joint Commission, the Fish and Wildlife Service, the Coast Guard, the Federal Maritime Commission, Food and Drug Administration, Agricultural Stabilization and Conservation Service, and the list goes on.

I'm not saying any of these people are wrong; we were just earlier this morning out working with the people at NOAA who have been working now in the western part of Lake Superior, going across into the Apostle Islands area, I'm told, right at this time, and they're working at recharting the lakes. The last time Lake Superior has been charted, I am told, might be close to 100 years ago, parts of it. So obviously these people all are doing worthwhile jobs, but there is no coordination. To have this kind of a system, I think it is one of the reasons why the Great Lakes has become, if you will, kind of an ugly stepchild for the Federal Government. We're spending more time worrying about Puget Sound or the Chesapeake Bay than we are worrying about the Great Lakes as a system, and this is part of the reason for this hearing. It is the reason for the legislation which I introduced, and now we have 10 other Senators from both political parties, who are supporting it.

Jack, I just wanted to get your sense of the relationship between the development of the kinds of businesses that you are in and that your competitors frankly are in, the boating and sailing kind of business, and the environment. It seems to me that probably no one could be a greater expert on the relationship between the importance of clear water and a strong, environmental kind of an image, than people in your business, whether you're in Manitowok or up here in Lake Superior. Have you had any experiences, or are there ways you can express the importance of having a coordinated environment in terms of being able to run these businesses at a profit?

Mr. **Culley**. Well, as Mr. Miller testified, the pristine quality of the Apostle Islands—if you had to pin down any single attribute of this area as a justification for the enormous growth of the type of business we are in, it's that. And it would follow, the corollary, without that there wouldn't be the interest, there wouldn't be the desire. I mean it sincerely, that "Sail Wisconsin" and the unique attributes of Wisconsin waters for the sailing experience are fully and totally analogous to the kind of "Ski Colorado" thing we've seen developed over the last 30 years. It's simply because it represents the best boating available in the United States today. That's the point of my actual experience, and the growth of this business and its extremely beneficial economic impact to Wisconsin is entirely dependent upon maintaining the type of experience that is available through waters that are clear to 15 feet, and the beauty of the Apostle Islands as an esthetic and a rewarding type of vacation experience. If that directs itself to the question, Senator.

Senator KASTEN. One other question. Someone suggested earlier that the boating business is dominated by a small business. Do you have any more detailed information, and are we correct in making that assumption?

Mr. CULLEY. Well, you're absolutely correct and, as I think Mr. Brown testified, in what other kind of a business can you imagine where our company, Sailboats, Inc., which was established 14 years ago, and after it had been 5 years old, it was at that point the oldest sailboat dealership in the upper Midwest. That tells you something pretty quickly about the relatively high turnover of small businesses in this area. And that's not changing, and it's not limited strictly to dealerships or marinas; it follows all the way up the scale to the manufacturers themselves. There's absolutely no large business in the sense. The best way to illustrate that in terms of builders is that the largest builder of sailing yachts and sailing boats in North America is probably a $30 million company. That's the largest. You can imagine what the other 2,000 are, below that. So it's an entirely small business area.

Senator KASTEN. Dave, I'm sure that Lakeland Boating is a giant corporation, but could you comment on this whole small business question? You suggested—but I'd like to just develop it a little bit more in terms of its importance. And I am also interested in—you talked about recreational boating in Lake Erie. I'm assuming that that all came back, along with the fishing and the chartering that you talked about.

Mr. BROWN. OK. First of all, as far as small businesses go, the back of our magazine is a brokerage section and it consists of advertisements for, primarily, used boats by dealers and/or boat brokers. We deal, in terms of selling that ad space, very, very seldom with an employee or an agency. We deal with the man who owns it. He simply calls up or we call him, and he tells us what he wants to advertise this month. This is not true when you're talking about a boat company; you deal with an ad agency, or something else. We had 48 pages of them in the most recent issue. So you can imagine—I don't remember the exact number of companies, but generally speaking, the man that we have in our card file as the contact is the owner. That would indicate to me that it's a fairly small business because if I were selling advertising to General Motors, I certainly wouldn't be calling the president.

Now, as far as recreational boating is concerned, in the broad definition of tourist I think we have to include people who are not, in the classic sense, bag and baggage and kids and traveling, taking in all of the sights. We have, in West Harbor alone, in my area, which is a small harbor, an estimated 5,000 boats, most of which are owned by people outside the area and most of which were not there when the fishing was bad and the pollution was good. Now we've got the other—the fishing is good and the pollution is bad, which is good for the lake, and the boats are there.

The boat sales—we have dealerships which have been launched and grown to a mature business, solely based on selling fishing boats in our area. Happy Days Marina sells virtually nothing but fishing boats.

So, yes, the tourist industry in my area was moribund when the lake was said to be dead, to all practical purposes. I don't have figures at the tip of my hand; I did include some in my report on the value just of sport fishing, which is the only thing that has been studied. We have no good figures on anything in our area but sport fishing, which is one of the other things. No one is looking at the total water-related boating, fishing, swimming, water skiing, sailing picture; everybody looks at one aspect of it. So you look at the figures that I've got which were collected on fishing. They only show what is going on with the fishing; they would not show if he sold—Mr. Culley, here—sold 15 sailboats here last year that went to Port Clinton, they would not show up in those numbers, which is another aspect of the problem that we're talking about. It's too—people are not looking at the overall figures.

Senator KASTEN. Pat, I wonder if you could describe for us some of the efforts that you are making to make people more aware of the Apostle Islands. And also, I think you had some statistics showing an increase in usage over the past couple of years.

Mr. MILLER. That's correct. Our visitor use has increased by about 10 percent per year over the last 6 or 7 years, with a couple of ups and downs. I think that, as you pointed out, the tourism industry is very vulnerable to publicity, both positive and negative, and we saw in 1978 or 1979 a fall off in visitor use because of poor publicity regarding fuel availability. I think last year we saw an influx of visitors due to that abnormally hot weather all through the Midwest; people came up to cool off. So I think that those types of things do affect our travel figures on a local basis.

As far as projecting promotional materials for the islands, normally we don't do a lot of this. However, I've just recently talked to our Office of Tourism in Washington and we've identified the Apostle Islands, I think, as perhaps one of the underutilized areas and perhaps we can get some public publicity and promotional help from those people, which I intend to pursue.

Senator KASTEN. I would like to thank all of you, members of our tourism and recreation industry panel. I think this is helpful information, and we thank you very much for your testimony.

Our next panel will talk to the importance of tourism to the State. Dr. Nicholls and Senator Theno.

We are pleased, first of all, to have Dr. Lee Nicholls from the Department of Habitational Resources of the University of Wisconsin in Stout.

Dr. Nicholls.

STATEMENT OF DR. LELAND L. NICHOLLS, DEPARTMENT OF HABITATIONAL RESOURCES, UNIVERSITY OF WISCONSIN-STOUT

Dr. NICHOLLS. Thank you, Senator Kasten, very much for this opportunity to testify.

At the risk of sounding like Carl Sagan, I will give you just a few statistics that possibly haven't been touched upon earlier.

First of all, we do know that we're dealing with millions and billions of many different things, that the industry is the second or third largest industry, in the Nation, and some academics feel that it may well be the world's largest industry by the year 2000. Tourism generates billions in sales, employs millions, generates billions in wages and salaries, generates billions in tax dollars at the State, local, and Federal levels. Recent statistics from the American Hotel and Motel Association, however, also indicate a little closer look at some of these statistics..

In 1983, 39.5 percent of the total increase in U.S. employment—new employment—could be attributed to the 137,000 new jobs in the travel industry.

One out of every two travel industry employees is female.

One out of every fifteen Americans is employed by the travel and tourism industry.

The average hotel stay is 3.5 days.

In 1981, 44 foreign visitors arrived in the United States every minute.

In 1981, the United States spent 3.5 cents per capita to promote tourism around the world, while the Bahamas spent $85. In this State this year, we will spend less than $3 per person.

By generating approximately $5 billion in 1983, Wisconsin's tourism industry is obviously a vital part of the State's economy. In northern Wisconsin, the natural and man-made tourist attractions generated approximately slightly less than $1 billion in gross sales.

Approximately 17 percent of northern Wisconsin's total employment is attributed to tourism. In some counties, this figure is nearing 40 percent. Of the top 20 counties in the State with the greatest impact of travel on local income, 11 or 12 counties are located in northern Wisconsin.

In the recent Wisconsin tourism industry study, researchers noted that "of all Wisconsin's regions, northern Wisconsin is the most popular." Although the region is blessed with an abundance of beautiful natural resources, significant declines in resort lodging sales, number of rooms, occupancy rate, an ability to attract upper income families, and changing demographic patterns present the tourism industry with imminent challenges and concerns.

Other Great Lakes States are faced with similar concerns and challenges. It doesn't take much attention to the two maps that I have placed up on the cork bulletin board, to appreciate the value of the Great Lakes to not only Wisconsin, but the other surrounding States and southern Canada. The destinations of the Arrowhead Country in Minnesota, the Duluth-Superior-Bayfield area, Door County, Green Bay and Milwaukee in Wisconsin, Chicago and the Gold Coast in Illinois, the Dunes of Indiana, the Upper Peninsula, northern Michigan and Detroit, Cleveland, Erie, Buffalo are all major local, State, or international destinations. In addition to the varying economic effects of the travel industry, the climate, interest of citizens, and environment must be carefully considered by planners.

Many elements of both recreation and conservation are essential to tourism. Recreation is more than social concern over physical fitness or mental enrichment. Much of the participation would not be possible if it were not for the components of tourism, such as travel, lodging, food service, and sales of products. Furthermore, elements of conservation, such as esthetics, resource protection, environmental education, and heritage interpretation are included in definitions of recreation.

Tourism is not only rounded out by the addition of commercialism to recreation and conservation; it is different, stronger and more penetrating because of the conservation and recreation components within its makeup and would not survive without them.

Probably never in the history of the world has one country had such a number of professional planners. Never has planning been the butt of such criticism. Never have we been more needful of planning. Jane K. Holtz, an architecture critic for "The Nation," observed that:

> Under the umbrella of "planning" sit tree planters and national energy policymakers, solid waste technicians and neighborhood preservationists; those who want to play games to discover local needs, and those who want to push computer buttons; guerrilla architects and Henry Ford. Is it to be physical planning or social planning? Regional or local? New buildings or old? And what of environmental or ecological input?

I have come to this beautiful lakeside setting and city of Superior this morning to plead, champion, and underscore the need for a plan for the Great Lakes which includes environmental ethics and wise use. Wisconsin's own late Aldo Leopold proposed a land ethic. We need a water ethic to accompany the surrounding land ethic. Although the dominion and conquest ethic has deep roots in our religious and economic history, please note the problematic scars and ghost remnants of mining and forestry in this region.

Two hundred years ago the Alps were considered by Samuel Johnson as "high, hideous, and uncouth." Thomas Jefferson likened cities to sores on the human body. Fellow citizens, we still have time to properly husband the Great Lakes and follow the lead of George Perkins Marsh, the grandfather of the equilibrium ethic. A political and moral reformation will still be required if technology is to aid conservation.

Last, I have been asked to address the means of assisting small tourism firms dependent on the Great Lakes for their economic survival. The following actions must be taken.

A continuation of the promotion of sightseeing, dining, and day and night life opportunities.

Development of model national and world-class attractions based upon the unique water and land resources of the Great Lakes region in targeted or clustered destinations.

A greater appreciation of the fragile environment of the Great Lakes, but also the incredible economic potential of tourism.

Increased accessibility and availability of venture capital.

Comprehensive water and land use planning banks and reserach and development centers.

Continued Federal support for lower inheritance and gift taxes.

And last, continued Federal support of infrastructure development in existing, potential, and probable tourism destination areas.

In conclusion, a brief story. A few years ago, I was doing research on the subject of "Crime Detection and Law Stabilization in Rural Tourist Destination Areas" in the remote hills and hollows of northwestern North Carolina. In a discussion with an elderly lady about the subject, I asked her if they had crime in a remote hollow like this. She said that "unfortunately, they did, and that the people would steal the hat right off your head. Last week, I had had 9 quarts of peach preserves stolen from beneath our home.

Just like where you come from, in the city." But then she added, "We do have something you don't have in the city, and that's clean water and clear water." We cannot do without clean and clear water.

We had better continue to plan at the local level to ensure the optimum utilization of tourist resources for the satisfaction of immediate and long-term needs, keeping public and private sectors abreast of investment opportunities in Great Lakes tourism, and providing public officials with information necessary for the regulation and stimulation of tourism and recreation.

Second, we must plan at the regional level to identify regions for tourism development in light of socioeconomic conditions, coordinate local objectives and those adopted by national authorities.

And last, plan at the national level for social, environmental, and cultural macrodevelopment, to integrate tourism planning into overall economic development, and to measure the economic impact of tourist activities. Like a centipede, Great Lakes tourism has many legs. We will lose the Great Lakes if each "leg" chooses its own destination.

Senate bill 2751 appears to me to be a governmental partnership in common sense, and a noble effort to avoid a tragedy of international proportions.

Thank you, Senator.

Senator KASTEN. We thank you very much. We appreciate your comments.

[The prepared statement of Dr. Nicholls follows:]

Dr. Leland L. Nicholls
Administrator and Professor
of Tourism
Department of Habitational Resources
H. E. 402
University of Wisconsin-Stout
Menomonie, Wisconsin

Senate Small Business Committee's Subcommittee
on
Entrepreneurship and Special Problems Facing Small Businesses
August 28, 1984
Superior, Wisconsin

Senator Kasten and Senator Weicker, thank you for the opportunity to present testimony related to Senate Bill 2751, a bill to provide for coordinated management and rehabilitation of the Great Lakes. It is with pleasure that I present to you my observations about (1)the economic importance of the Great Lakes to tourism in Northern Wisconsin and other lake states, (2)the importance of protecting the Great Lakes environment, and (3)assistance for small firms dependent upon the Great Lakes for their economic survival.

Statistics recently published by the American Hotel and Motel Association indicate that tourism is the second largest retail industry in the United States and includes 30 interrelated businesses. Tourism generates $194 billion in sales or 6.3 percent of the gross national product, employs 7 million Americans, paying $41 billion in wages and salaries and paying $21.1 billion in federal, state and local tax income. Other characteristics of the travel industry include the facts that:

1. The travel industry created 137,300 new jobs in 1983 or 39.5 percent of the total increase in U.S. employment.
2. One out of every two travel industry employees is female.

3. In 1983, employees in the lodging industry worked 1.8 billion hours, serving more than 250 million guests.
4. One out of every 15 Americans is employed by the travel and tourism industry.
5. The average hotel stay is 3.5 days.
6. In 1981, 44 foreign visitors arrived in the U.S. every minute.
7. In 1981, the U.S. spent 3.5 cents per capita to promote tourism around the world while the Bahamas spent $85.[1]

By generating approximately $5 billion in 1983, Wisconsin's tourism industry is obviously a vital part of the state's economy. In Northern Wisconsin, the natural and man-made tourist attractions generated approximately $1 billion in 1983 in gross sales.

Approximately 17 percent of Northern Wisconsin's total employment is attributed to tourism. In some counties this figure is nearing 40 percent. Of the top 20 counties in the State with the greatest impact of travel on local income, 12 are located in Northern Wisconsin.[2]

In the recent Wisconsin Tourism Industry Study, researchers noted that "of all Wisconsin's regions, Northern Wisconsin is the most popular." Although the region is blessed with an abundance of beautiful natural resources, significant declines in resort lodging sales, number of rooms, occupancy rate, an ability to attract upper income families, and changing demographic patterns present the tourism industry with imminent concerns.[3] Other Great Lake States are faced with similar concerns and challenges. Please note the maps for a visual demonstration of the impact of tourism to the Great Lakes. The destinations of Arrowhead's Country in Minnesota, the Duluth-Superior-Bayfield area, Door County, Green Bay and Milwaukee in Wisconsin, Chicago and Illinois'

Gold Coast, The Dunes of Indiana, the Upper Peninsula, Northern Michigan and Detroit, Cleveland, Ohio, Erie, PA, Buffalo, New York are all major local, state or international destinations. In addition to the varying economic effects of travel activity, the climate, interest of citizens, and environment must be carefully considered by planners.

Many elements of both recreation and conservation are essential to tourism. Recreation is more than social concern over physical fitness or mental enrichment. Much of the participation would not be possible if it were not for the component of tourism, such as travel, lodging, foodservice and sale of products. Furthermore, elements of conservation, such as aesthetics, resource protection, environmental education and heritage interpretation are included in definitions of recreation.

Tourism is not only rounded out by the addition of commercialism to recreation and conservation; it is different, stronger and more penetrating because of the conservation and recreation components within its makeup and would not survive without them.[4]

Probably never in the history of the world has one country had such a number of professional planners. Never has planning been the butt of such criticism. Never have we been more needful of planning. Jane K. Holtz, an architecture critic for The Nation, observed that,"Under the umbrella of "planning" sit tree planters and national energy policymakers, solid-waste technicians and neighborhood preservationists; those who want to play games to discover local needs and those who want to push computer buttons; guerrilla architects and Henry Ford. Is it to be physical planning or social planning? Regional or local? New buildings or old? And what of environmental/ecological "input?"[5]

I have come to this beautiful lakeside setting and city of Superior this morning to plea, champion and underscore the need for plan for the Great Lakes which includes environmental ethics and wise-use. The late Aldo Leopold proposed a land ethic. We need a water ethic to accompany the surrounding land ethic. Although the dominion and conquest ethic has deep roots in our religious and economic history, please note the problematic scars and ghost remnants of mining and forestry in this region.

Two hundred years ago the Alps were considered by Samuel Johnson as "high, hideous and uncouth." Thomas Jefferson likened cities to sores on the human body. Fellow citizens we still have time to properly husband the Great Lakes and follow the lead of George Perkins Marsh, the grandfather of the equilibrium ethic. A political and moral reformation will still be required if technology is to aid conservation.

Lastly, I have been asked to address the means of assisting small tourism firms dependent on the Great Lakes for their economic survival. The following actions must be taken:

1. A continuation of the promotion of sightseeing, dining and day/night life opportunities.
2. Develop model national and world class attractions based upon the unique water/land resources of the Great Lakes Region in targeted or cluster destinations.
3. A greater appreciation of the fragile environment of the Great Lakes, but also the incredible economic potential of tourism.
4. Changes in liability and insurance protection for recreation oriented facilities.

5. Increased availability and accessibility of venture capital.
6. Comprehensive water/land use planning data banks and research and development centers.
7. Adoption of school calendars with post-Labor Day opening dates.
8. Continued federal support to lower inheritance and gift taxes.

In conclusion, a brief story. I was doing research on "Crime Detection and Law Stabilization in Rural Tourist Destination Areas" in the remote hills and hollows of Northwestern North Carolina. In a discussion with an elderly lady about the subject, I asked her if they had crime in a remote hollow like this. She said that "unfortunately, they did and that the people would steal the hat off your head. Just like where you come from in the city." Then she added, "But we do have something you don't have in the city and that is fresh, pure water." The world can do without many things, but not clear, clean water. We had better continue to (1)plan at the local level to ensure the optimum utilization of tourist resources for the satisfaction of immediate and long term needs, keeping public and private sectors abreast of investment opportunities in Great Lakes tourism, and providing public officials with information necessary for the regulation and stimulation of tourism and recreation, (2)plan at the regional level to identify regions for tourism development in light of socioeconomic conditions, coordinate local objectives and that adopted by national authorities, and (3)plan at the national level for social, environmental and cultural macro development, to integrate tourism planning into overall economic development and to measure the economic impact of tourist activities. Like a centipede, Great Lakes tourism has many legs. We will lose the Great Lakes if each "leg" chooses its own destination.

Thank you.

REFERENCES

[1] Lodging Industry Profile, American Hotel and Motel Association, 1984.

[2] Economic Impact of Tourists in Wisconsin - 1981, Division of Tourism, Madison, WI, 1982.

[3] Wisconsin Tourism Industry Study, Department of Development, Madison, WI, 1983

[4] Tourism Planning, by Clare Gunn, 1979.

[5] Striving for a Common Sense of Environmental Ethics," an address presented to the Blue Ridge Planning Conference, 1977.

Others

Contributing to Tourism, by U. Blank, L. Simonson, G. Ballman, J. Burke, R. Korte and A. Heikkila, Agricultural Extension Service, University of Minnesota, 1984.

Upper Great Lakes Regional Recreation Planning Study Summary Report, Cooperative Extension Programs, University of Wisconsin-Extension, Madison, WI, 1975

Small Business Enterprises in Outdoor Recreation and Tourism, Subcommittee on Environmental Problems Affecting Small Business of the Permanent Select Committee on Small Business, House of Representatives, December, 1974.

A Sand County Almanac by Aldo Leopold, 1949.

The Governor's Blue Ribbon Task Force on Tourism Final Report, 1982, Madison, WI, 1983

Vacationscape: Designing Tourist Regions by Clare Gunn, 1972.

Planning a Tourist Destination Region for an Age of Leisure by Leland L. Nicholls, 1976.

Senator **Kasten**. Our next witness is Senator Dan Theno who, frankly, needs no introduction to anyone in this room. Dan and I have served together in the State legislature at one time, so he and I have worked together. I think there is probably no one who has, over a longer period of time, worked at the issues that are the subject of the hearings before us today.

I know, Dan, that you've had an opportunity to listen to some of the testimony that's come before, and I also appreciate your support and endorsement of our legislative efforts. But I think that you, probably as much as anyone in the State of Wisconsin, understand and have worked for some of the goals that we're talking about today when we're talking about the importance of tourism and the relationship between tourism and our environment.

So it's a special pleasure for us to have you appear before us. Senator Dan Theno.

STATEMENT OF HON. DANIEL THENO, STATE SENATOR, STATE OF WISCONSIN

Mr. **Theno**. Senator Kasten, it's really a pleasure of having the opportunity of saying a few brief words before your subcommittee, and I want to personally thank you for coming up to the great city of Superior. We're very pleased to have you here.

I believe that the legislation you have offered is absolutely necessary to protect the esthetics, the ecological and the economic interests of the Great Lakes States, truly one of the great wonders of the world.

The Federal Government, the State of Wisconsin, and other States in the region and local governments of communities all along the Great Lakes have a great deal invested in these lakes. Businesses and industries have investments that are designed to bring tourists to these lakes, investments that are linked directly to the health of the Great Lakes.

If we allow the water quality of the Great Lakes to decline—or, in some instances, to deteriorate even further—we will lose billions and billions in cold, hard cash. We will also suffer as a society, knowing that we have destroyed or even compromised the quality of something as special as the Great Lakes.

Taxpayer investment in the Great Lakes, an investment aimed at increasing tourism and visitor traffic, is substantial. We are appropriately here in the city of Superior that serves as a perfect example of what can be done to enhance the relationship between a large body of water and the economy of a community.

Examine for a moment how much the Federal Government, the State of Wisconsin, and the city of Superior—as well as private industry—have invested in just two facets of the Barkers Island project.

The marina was built at a cost of $6.1 million, with some $4.3 million coming from the Federal Government. The city of Superior has a substantial portion of the remaining amount invested through the sale of general obligation bonds. And the State of Wisconsin has some one-quarter million invested as well.

The cost of the hotel on Barkers Island stands at some $5.2 million; again, through a partnership of private industry, Federal, city, and State governments.

This adds up to an investment worth protecting. And Superior is just one example of what is happening to the south shore of Lake Superior. Numerous communities along the south shore have developed or are in the process of developing recreational projects that are designed to build upon the appeal and drawing power of the world's largest lake.

Among these are the Washburn Waterfront project. This is a $7 million investment by private industry, State, and Federal Government and local government. It is a taxpayer investment. Like Barkers Island, the Washburn project promises to inject new and lasting life and vigor into the economy of the region. I believe you'll be hearing testimony, or have heard testimony, about the specific effects of the Barkers Island project on the economy of this community.

We are also talking about similar projects in Ashland, LaPointe, Cornucopia, and Herbster. These developments, too, will bring additional tourist dollars to the economy.

What could happen to 31,280 square miles of clean, fresh water that covers an area equivalent to the States of Massachusetts, Connecticut, Rhode Island, Vermont, and New Hampshire? What would we do with the possibility of endangering the quality of this water? What would happen to the economy, to the ecology? I think it would be a lot.

You don't have to be a scientist or an expert to figure out what threatens the Great Lakes. You don't have to be a high-ranking Government official to know what could destroy the ecological wonder and the considerable economic impact that the Great Lakes have provided.

Take a look, quickly, at Lake Michigan. Consider for a moment what is happening to the fishery of that great lake, a resource that represents a considerable investment. The State of Wisconsin alone spends some $8 million to maintain the fishery in Lake Michigan. What is happening to that investment right now? At this very moment I believe it is at risk because of the chemical contamination of fish that have been planted there. I don't want to sound like an alarmist on the issue. The fish, however, are cleaner than what has been in the past, but I find little comfort in that. But we are also finding out more about the chemicals that are being found in the fish. As a result, the Federal Government is revising standards, along with the State of Wisconsin, for acceptable levels of contamination, and more fish are being restricted.

What is at risk is not only a considerable investment, but an enormous return on that investment. In the State of Wisconsin alone we realize an annual return of some $40 million to $50 million a year spent by Great Lakes sport fishermen. How will the recent warnings about eating fish out of Lake Michigan affect that industry?

On a regional basis, according to the figures supplied by the U.S. Fish and Wildlife Service, anglers spend about $440 million annually fishing in the Great Lakes. The total impact of that $440 million on—just the sports fishermen, again—on the region is about $1 billion. This means that if the sports fishery of the Great Lakes were stopped, about $1 billion in income would be shifted from the present sectors to other sectors of the regional economy, or to other regions of the country.

The value of commercial fishing has been estimated to be about $25 million annually in U.S. waters. This does have an impact on tourism. In the city of Bayfield, for example, tourists come to experience the New England fishing village atmosphere and partake in a fish boil. The same is true of other communities along the south shore, and it is especially true along the Lake Michigan shore and the Door County area.

We have seen contamination of fish that support this industry and that provide us our income. We have yet to see just how this contamination, is going to affect other sectors of the economy, but clearly it would be considerable.

I would like to finish off with just a few concerns that are not in my prepared text. I am a member of the Coastal Management Program in the State of Wisconsin, Senator, and I was appointed by that body to head up a task force on dredging.

It was mentioned before that your legislation would try to eliminate some duplication. I can tell you there's a lot of duplication when it comes to dealing with the Great Lakes. As the chairman of the Task Force on Dredging for the State of Wisconsin, I was very much involved in getting some alternative dredging proposals developed for the city of Superior, the Superior Harbor, and Kewaunee Harbor along Lake Michigan. I tell you, Senator, the hoops that we had to go through and the agencies that we had to contact—Army Corps, State B&R, the Fish and Wildlife Service—we had to go through a lot of hoops to just find an alternate economically—and ecologically acceptable way of dealing with dredged material. And if your legislation would eliminate some of that duplication that we see, I think that alone would be a step in the right direction.

I am also very much involved in the coming issue of water diversion. I find that there is a great lack of coordination between the States on a great many important issues. I just returned from a conference in Chicago on the issue of Great Lakes water diversions. We in Wisconsin, through legislation I have offered, are trying to set up regulations to restrict water diversions out of the Great Lakes bordering Wisconsin. The State of Michigan has prohibited Great Lakes water diversions altogether; that's clearly unconstitutional. And many States aren't doing anything. I was interested, in attending that conference, that on that particular very emotional, very important issue of Great Lakes water diversion, there seemed to be no coordination at all between the Great Lakes States.

So I say that your legislation is important for the elimination of duplication and trying to deal with the problems that face the Federal Government and the States and local governments involved, and providing some coordination that I think is very desperately needed.

So I commend you for introducing that legislation. I very strongly support it and wish it the best of luck in the Congress.

Senator **Kasten**. Let me say thank you, first of all, Dan.

[The prepared statement of Mr. Theno follows:]

STATEMENT OF HON. DANIEL THENO, STATE SENATOR, STATE OF WISCONSIN

It is indeed a pleasure to speak to you today and I would like to offer my congratulations and support for what has been accurately characterized as a "Save the Lakes" bill offered by Senator Kasten.

I believe this legislation is necessary to protect what I consider one of the truly great wonders of the work, the Great Lakes. It is necessary to protect these lakes from an aesthetic and econological standpoint. It is also necessary to protect this considerable economic investment we have in the Great Lakes.

The federal government, the State of Wisconsin, other states in the region and local governments of communities all along the Great Lakes have a great deal of money invested in these lakes. Businesses and industry have investments that are designed to bring tourists to these lakes, investments that are linked directly to the health of these lakes.

If we allow the water quality of the Great Lakes to decline, or in some instances deteriorate even further, we will lose billions and billions in cold hard cash. We will also suffer as a society knowing that we have destroyed, or even compromised the quality of something as special as the Great Lakes.

Taxpayer investment in the Great Lakes, an investment aimed at increasing tourism and visitor traffic, is substantial. We are appropriately here in a city that serves as a perfect example of what can be done to enhance the relationship between a large body of water and the economy of a community.

Examine for a moment how much the federal government, the state, the City of Superior and Private industry has invested in just two facets of Barker's Island.

The marina was built at a cost of $6.1 million, with some 4.3 million of that coming from the federal government. The City of Superior has a substantial portion of the remaining amount invested through the sale of General Obligation Bonds. And the State of Wisconsin has some $200,000 invested.

The cost of the Hotel on Barker's Island stands at some $5.2 million, again through a partnership of the federal government, the city and private industry.

This adds up to an investment worth protecting. And Superior is just one example of what is happening on the South Shore of Lake Superior. Numerous communities along the South Shore have developed or are in the process of developing recreational projects that are designed to build upon the appeal and drawing power of Lake Superior.

Foremost among these is the Washburn waterfront project. This is a $7 million dollar investment by private industry, the federal, state and local government. It is a taxpayer investment. Like Barker's Island, it promises to inject new and lasting life and vigor into the community and the region. And I believe you'll be hearing testimony about the specific effects of the BI project on the economy.

We are also seeing waterfront developments in the Cities of Bayfield, Ashland, Herbster, Cornucopia, and La Pointe. These too are developments designed to improve access to the lake and improve tourism in this region. These are developments that will be dependent on an ever-clean and ever-healthy Lake Superior. If something should happen to this lake, if water quality should deteriorate, if soil erosion continues to worsen, then this considerable investment could be at risk. The return on our dollar investment would surely decline.

What could happen to 31,280 square miles of clean fresh water that covers an area equivalent to the States of Massachusetts, Connecticut, Rhode Island, Vermon and New Hampshire? What could we do that would possibly make a dent in this wonderous body of Water? The answer is, in very simple terms: A lot.

And you don't have to be a scientist or an expert to figure what threatens the Great Lakes. You don't have to be a high ranking government official to know what could destroy this ecological wonder and the considerable economic investment that I have alluded to.

Take a look at Lake Michigan. Consider for a moment what is happening to the fishery in that lake, a resource that represents a considerable investment. The State of Wisconsin alone spends some $3 million in maintaining this fishery that supports a healthy and growing sport fishing industry and a commercial fishing industry.

What is happening to that investment right now? At this very moment I believe it is at risk because of chemical contamination of fish that have been planted there. I don't want to sound like an alarmist on this issue. The fish are cleaner than they have been in the past but I find little comfort in that. But we are also finding out more about the chemicals that are being found in the fish. As a result, the federal government is revising standards for acceptable contamination and more fish are being restricted.

What is at risk is not only a considerable investment, but an enormous return on that investment. In the State of Wisconsin alone we realize an annual return of some $40 to $50 million a year spent by Great Lakes Sport Fishermen. How will the recent warnings about eating fish affect this industry?

On a regional basis, according to fugures supplied by the US Fish and Wildlife Service, anglers spend about $440 million annually fishing for Great Lakes fish. The total impact of the $440 million on the regional economy is about $1 billion.

This means that if the sport fishery for Great Lakes fish were stopped, about $1 billion in incomes would be shifted from the present sectors to other sectors of the regional economy or to other regions.

Commercial fishing, the value of such, has been estimated to be about $25 million annually in U.S. waters. This does have an impact on tourism. In the City of Bayfield, people come to experience the New England Fishing Village atmosphere or partake in a fish boil. The same is true of other communities along the South Shore and it is especially true along Lake Michigan and the Door County area.

We have seen contamination of fish that support this industry and that provide us this income. We have yet to see just how this contamination, in light of recent advisories, will affect the very lucrative sport fishing industry, but there is no doubt in my mind that it will.

We have not, fortunately, seen this type of contamination in Lake Superior. It is unlike the rest of the Great Lakes because it is essentially pure and unchanged by humans.

Any policy that affects the Great Lakes should take this into consideration. Environmental protection efforts aimed at other Great Lakes must be aimed at mitigating or reducing damage that has already occurred. In the case of Lake Superior, we still have an opportunity to prevent damage. but we are seeing warning signals. I believe contaminants have been found in fish in lakes on the Island Of Isle Royale, indicating that we are not immune. If priorities are established, prevention of damage to Lake Superior should be one of them.

Finally, there is another threat to this investment that exists that Senator Kasten's bill could help address. I'm talking about water diversion. I see Senator Kasten's bill as a way to help Great Lakes States develop a regional policy to deal with massive water diversions. The federal office proposed by Senator Kasten would be valuable for both studying the impacts of large scale diversion and for helping states' implement a regional response to diversion attempts.

Most people agree that the threat of water diversion is very real. This leads to concern about the environmental and economic impact of massive water diversions. These impacts, however, need to be studied.

Increased understanding of the impacts through study by the federal office you have proposed should provide incentive for states to act together to deal with diversion attempts.

It is critical that the Great Lakes states work together on this issue. At present, I believe individual states are pursuing different policies to deal with water diversion. This is counterproductive to say the least. Michigan has a ban on diversion which most feel is unconstitutional. In Wiconsin we are considering protecting the lakes through a regulatory mechanism. Other states are not dealing with the issue at all. Your proposal can help change that.

I thank you for this opportunity and I wish you the best of luck.

Senator **Kasten**. I am interested in your practical experience in terms of the dredging because, as we have more and more hearings, we are running into more and more people who are, in fact, kind of bumped up against this bureaucratic nightmare, and that's truly what we're trying to work with.

It's not clear right now whether or not some of these agencies can, in fact, be eliminated or, in fact, if they should be eliminated. I'm not sure that they should. But what we need to have is a central coordinating body, a central policy-developing body so that we can coordinate—not just the Federal agencies, but also all these different States. When we get involved in terms of the money we are spending, the taxpayer money, those dollars are being spent by all the States in the Great Lakes, not just for stocking the fish but for numerous kinds of things that are related to that; and we're talking about a large amount of money, as well.

I'm on the Percy bill, which is the diversion bill that Chuck Percy, the Senator from Illinois, has; but I think you're right. I'm not sure how we can—there are some legal problems about any of that legislation, but our legislation does address the question in the findings, in the beginning of page 2 of the legislation, we address the problem of diversion. It is one of the things that we would look to for this overall coordinating body to at least consider and to address.

You have had a lot of experience in this area in terms of developing increased tourism business. Primarily for the record, but also because I know you've got a special interest in this, I wonder if you could respond to the question that was asked to one or two other witnesses here today about the tourism industry and the tourism business being primarily a small business-dominated sector of our economy? In your area—not just along the lakes, but through your entire Senate district—do you find that the tourist business is primarily small business?

Mr. THENO. It's almost all small business, Senator. It's a very vital portion of our economy.

Let me make a kind of a broader statement in answer to your question. The northwestern counties of Wisconsin are growing faster than the statewide average in population. That hasn't occurred in 75 years. Many people thought that this tremendous growth in many of the counties in northwestern Wisconsin was the result of people finding out what a wonderful environment we have and what fine people we have up here, and "we're moving up here to retire." That, indeed, was an important factor; but according to a study done a few years back by the Upper Great Lakes Regional Planning Commission, the main reason for that growth in the northwestern counties was the growth in tourism and small industry. Again, we have not seen growth in many of these counties in 75 years, and all of a sudden we're seeing a tremendous expansion in the economic sector of the northwestern portion of the State and the population of the northwestern portion of the State, and in average incomes which are going up faster than the statewide average. We've had a great development in small tourist industries; we've had a great development in small manufacturing, and that has played a very important role. I, quite frankly, as a Senator from this district, remain very optimistic about the future because I think that tourism, as an example, has the sky as a limit. I think that that's going to grow and grow and grow. We've got to do a better job at the State level in promoting tourism. We've got to continually monitor the quality of the environment, but I think we must cooperate with the Federal Government in making sure that the greatest resource of them all, Lake Superior and the other Great Lakes, is protected in its quality so that, indeed, we can look forward to even further growth in tourism and other industries.

Senator KASTEN. Thank you.

Lee, I was interested in your statistics, and particularly the statistic that in 1981 the United States spent 3½ cents per capita to promote tourism, and the Bahamas spent $85. Now, obviously that's a statistic that we have to understand a little bit; the population of the Bahamas is a whole lot different than the population of the United States of America. But you have statistics, either on a regional basis or a statewide basis, in which you can show that a significant increase in promotion dollars in fact leads to a significant increase in tourism.

Dr. NICHOLLS. I will assemble them for you. I don't have them with me, but a number of associations—local, county, State, chambers of Commerce that have compile them. Some regions have the economic costs and various types of business formulas for monitoring the cost and benefits of tourism.[1]

Senator KASTEN. I'd appreciate that if you could provide it, because one of the questions that we're dealing with which is related to this is how we get it, and that's why Donna Tuttle was here from the Department of Commerce. She is the person who is in charge of this, and she is also in charge of the efforts made as to how those dollars can best be used.

A couple of people testified that we have an increasing number of visitors from Germany, for example, to Wisconsin. Even with the strong dollar, which has turned out to be a detriment to travel in the United States of America this year, we are still seeing tourism from abroad increasing, not decreasing.

Dr. NICHOLLS. I want to add that a recent study was completed by Mr. Jim Burke, a member of the University of Wisconsin-Stout's faculty, in a national pilot project related to the costs and benefits of tourism to the boundary waters canoe area. In that specific study, the city of Ely, MN, would have statistics relative to many of the communities in this State, especially this geographic section of the State.

One statistic that Donna Tuttle mentioned in testimony was the $1,100 per capita spending per day by foreign tourists. I read this week in U.S.A. Today that the average per capita expenditure of foreign tourists from Latin America in Miami was $982.80 per day. So that statistic may be quite accurate and also surprising.

Senator KASTEN. Thank you, and we look forward to working with you as we do with others.

Dan, did you have a comment?

Mr. THENO. Just a brief comment in regard to the question about tourism promotion and its effect on the economy. I would hope that you and other legislators at the national level representing the Great Lakes States, when you are talking about tourism promotion, would look at promoting it on a regional basis. We are involved at the State level, of course, in promoting tourism basically to get tourists from Twin Cities and Chicago; but I think if there's going to be national involvement in cooperation with the Great Lakes States, let's start getting some tourists from Colorado and Alabama, as well. [Laughter.]

Senator KASTEN. Let me say thank you, first of all to Senator Theno, and also Lee Nicholls. We appreciate your testimony, and we greatly appreciate the testimony from all of the witnesses here today.

As I mentioned earlier, there may be questions from other members of the committee or staff as we follow up on the details and prepare testimony, and also review the transcript of the hearings.

---

[1] Information not available at time of going to press.

As you know, the hearings are being recorded and will be, in due time, transcribed.

I thank everyone who participated today. I think we're taking—we have made a number of steps in the right direction. I thank the members of the panel, and particularly the people who have helped in preparing this testimony.

Thank you very much, and the hearing is adjourned.

[Whereupon, at 11:57 a.m., the subcommittee recessed, to reconvene at the call of the Chair.]

APPENDIX

Sea Grant Program
Sea Grant Extension Program
208 Washburn Hall ☐ University of Minnesota/Duluth ☐ Duluth, Minnesota 55812 ☐ (218) 726-8106

August 23, 1984

Senator Robert Kasten
SH110
Washington, D.C. 20510

Dear Senator Kasten:

Since I will be unable to attend the August 28 public meeting in Superior, Wisconsin regarding the "Save the Lakes Act" (S.2751), I would like to offer the following written testimony.

Minnesota's North Shore of Lake Superior provides the environmental setting for an important economic component of the local communities--the recreation/tourism industry. The impact of this industry was summarized by Sea Grant researchers, Dr. Uel Blank and Dr. Timothy Knopp, as having a very positive economic influence:

> "Tourism is now the most stable and one of the largest parts of the North Shore economy. In 1981 there were 1.4 million tourists. They spent over $24 million - a sum equal to about one-third of all retail goods and service sales on the North Shore. At least 500 full-time job equivalents result from this activity; several times this number of people receive direct income from tourism when all-season jobs are considered.
>
> Retail services in the 19 communities throughout the 150-mile length of the North Shore are involved in the tourism industry. Some, such as lodging facilities make nearly 100 percent of their sales on tourists. Grocery stores, restaurants, and automobile services make 20 to 50 percent of their sales on tourists. Most of these operations could not exist without tourist income. Another group of operations make fewer than 20 percent of their sales to tourists. These include: drugstores, general merchandising stores, medical services, hardware, clothing, and similar types of operations.
>
> In the 150-mile zone surveyed, 110 private lodging businesses (motels, hotels, resorts, and condominiums) provide overnight commercial facilities. Ten of these provide camping. Five state parks also offer camping along with two municipal campgrounds. There are also approximately 900 private second homes owned by nonresidents (tourist owners)." (U. Blank and T. Knopp, 1983, Tourism's Market Potentials on the North Shore, Minnesota Sea Grant Research Note No. 5).

Tourists to the North Shore have been characterized, by Sea Grant researchers, as individuals seeking outdoor and environmentally oriented activities and experiences that are the product of the area's unique natural resources and the public and private sector facilities and businesses (T. Knopp and U. Blank, 1983, The North Shore Experience, Minnesota Sea Grant Research Report No. 8). While the recreation/tourism industry is an important economic base for the North Shore, the need to maintain and protect the natural resources of the area must be actively considered since it provides the setting for a majority of the recreation/tourism experiences. A balance between management and protection of the Great Lake resources and the need for economic development will help ensure and enhance environmental quality and economic stability in the future. This concept was stated in the proposed Act (S.2751) in Sec. 2. (a)(6):

"Careful management of the Great Lakes will permit the rehabilitation and protection of the lakes, their waters, and their ecosystems, while continuing and expanding their use for industry, food production, transportation, and recreation."

Sincerely,

Chad P. Dawson

Dr. Chad P. Dawson
Marine Recreation/Tourism Agent

jz

Enclosures

cc: Dr. Donald C. McNaught, Director Minnesota Sea Grant College Program
Mr. Dale R. Baker, Director Minnesota Sea Grant Extension Program

Sea Grant Research Notes
University of Minnesota Sea Grant Program

Number 5

TOURISM'S MARKET POTENTIALS ON THE NORTH SHORE

Uel Blank and Timothy Knopp

This report is for those seeking ways to take full advantage of tourism's income potential for the North Shore. Highlights are provided here; more detail is available in Sea Grant Research Report #7, **The North Shore's Travel Tourism Industry and Its Market Segments.**

DYNAMICS OF NORTH SHORE TRAVEL/TOURISM

The North Shore has endured economic booms and busts throughout its past, due to its major dependence upon raw materials industries. Tourism, in contrast, has been a relatively stable part of the North Shore economy, but Minnesota's tourism has the problem of seasonal income and over recent decades has lacked a robust growth. The North Shore's travel/tourism industry reflects international, social, and economic trends and technological developments. In doing so it exhibits dynamic adaptation and contributions.

Travel-tourism began on the North Shore almost a century ago. It was based upon travel by steamboat and railroad and was primarily the province of a relative few. Major technological developments, the family automobile, rising incomes and post World War-II expectations, advancements in travel industry marketing, improvements in jet travel, and artificial air-conditioning all worked to the disadvantage of the North Shore. The impact of competition from the U.S. sunbelt and from international destinations was felt. These factors, combined with escalating operating costs, have continued to exert influence. For the present and future, the 1980 North Shore tourism industry appears posied for a major turnaround.

TOURISM MARKET IMPACT

Tourism is now the most stable and one of the largest parts of the North Shore economy. In 1981 there were 1.4 million tourists. They spent over $24 million — a sum equal to about one-third of all retail goods and service sales on the North Shore. At least 500 full-time job equivalents result from this activity; several times this number of people receive direct income from tourism when all-season jobs are considered.

Retail services in the 19 communities throughout the 150-mile length of the North Shore are involved in the tourism industry. Some, such as lodging facilities make nearly 100 percent of their sales on tourists. Grocery stores, restaurants, and automobile services make 20 to 50 percent of their sales on tourists. Most of these operations could not exist without tourist income. Another group of operations make fewer than 20 percent of their sales to tourists. These include: drugstores, general merchandising stores, medical services, hardware, clothing, and similar types of operations.

In the 150-mile zone surveyed, 110 private lodging business (motels, hotels, resorts, and condominiums) provide overnight commercial facilities. Ten of these provide camping. Five state parks also offer camping along with two municipal campgrounds. There are also approximately 900 private second homes owned by nonresidents (tourist owners).

Tourism's dominance of the economy is indicated by the fact that 58 percent of all traffic at exit points is by tourists. In the winter season, it stays about one-half, at 52 percent. Summer season data is dramatic: in 1981 there were 544,300 tourist trips. They were on the shore for a total of almost 1.4 million person-days. This means that the average **daily** number of tourists was 15,000 during June, July and August. This is an average daily density of 100 tourists per mile!

TWO KINDS OF TOURISTS

Two distinctly different kinds of tourists are recognized: those who do not stay overnight, and those who do stay overnight. Both kinds are important, but in vastly differing ways.

Table 1. Tourists: Overnight and Non-overnight

Measures	Non-overnight Percentage	Overnight Percentage
Vehicle Trips	70	30
Person Trips	62	38
Person Days	32	68

Note: Percentages add horizontally to 100 percent

Seven out of ten tourists do not stay overnight. Those who do, however, stay overnight in larger parties and are on the shore more total days. In summer, those staying overnight number 83 out of 100.

Those not staying overnight spend much less per person per day on the shore: in summer, $2.90 per day, compared to those who do stay overnight, $9.50 per day. Those who do not stay overnight account for 53 percent of the tourist vehicles encountered, but contribute only 6 percent of the revenue.

This group consists of suppliers, repairmen, recreationists who live nearby, and tourists who are taking short excursions. The opportunity exists to sell these people services.

The University of Minnesota is an Equal Opportunity Educator and Employer

WHY A NORTH SHORE TRIP?

Most tourist travel to the North Shore is for recreation. The dominance of dollar impact and person-days on the shore is astonishing. Throughout the year 60 percent of all person trips are for recreation. In the summer this increases to 78 percent of tourist person days for recreation, and these people spend 89 percent of the dollars. Eighty percent of the total tourist income is spent by those tourists staying overnight.

Table 2. Summer Tourists: Reasons for Coming

North Shore Travel	Dollars Percentage	Person Trips Percentage	Person Days Percentage
Work	2	10	5
Visit Friends	3	5	8
Pleasure, Sightsee	89	67	78
Personal Business	4	12	6
Pass Through	2	6	3
Total Percentage	100	100	100
Total Number	11,400,000	544,000	1,367,000

The outstanding visual amenities of the North Shore attract most of the summer and early fall tourists. They enjoy seeing and being in the general North Shore-North Woods environment. On a scale of 1 to 5 they rate seeing the vistas of the lake, the rocky escarpments and the north woods an almost perfect 4.8. Increasing numbers appear to be coming to involve themselves in active recreational pursuits such as hiking. This is particularly true for winter sports activities. It is discussed further in the last sections of this report.

Minnesota residents make up the majority of North Shore tourists, and the North Shore is reached mainly by automobile. (Wisconsin residents tend to recreate within their own state, and other large population concentrations are a full day's drive or more distant.)

Table 3. Tourists Home Locations, by Season

Season	Minnesota Percentage	Other States Percentage	Canada Percentage
Winter	72	17	11
Spring	67	17	16
Summer	55	37	8
Fall	58	30	12
All Year	60	30	10

Note: Percentages add to 100 horizontally, data are in terms of person-trips. Those living within 50 miles of Minnesota in the U.S. make up about 50 percent of the tourists visits.

Table 4. Average Expenditure Per Party, Summer Use

Home Location	Dollars
Minnesota	94
Other U.S. States	76
Canada	30
All Summer Tourists, Parties	52

Minnesota tourists spend more money at $94 per summer party than those from other states. Minnesotans who make up 56 percent of the person-trips in summer make 60 percent of the tourist expenditures. (The only exception are parties from the states of Illinois, Indiana, Michigan and Ohio. They average a $97 expenditure per summer party.)

In winter the proportion of Minnesota tourists is substantially more than in summer, and their spending is proportionally larger.

WHAT FACILITIES DO THEY USE?

This question can be analyzed in two ways: (1) the tourist segments according to their use of lodging accommodations, and (2) their economic impact on different facilities as measured by their spending patterns.

The following figures compare the means of lodging by all staying overnight on the North Shore in 1981 with figures from summer 1981.

Table 5. Tourists Lodging Means

Means of Lodging	All 1981 Percentage	Summer 1981 Percentage
Commercial Room (Motels, Resorts, Condos)	47	43
Camp	26	31
Second Home	15	18
Friends and Relatives	12	8
Totals	100	100
Person Days	1,781,000	1,134,000

Note: Data are in person-days

To summarize the pattern of tourists staying overnight on the North Shore: about half of the persons use motels, resorts, or condos; about one-fourth use campers; and another one-fourth are split 50-50, using second homes or staying with residents who are friends and relatives. In the summer season, camping and second homes become somewhat more important.

Another kind of "bottom line" is in terms of economic return to the North Shore by those using the different kinds of overnight lodging. This information for all forms of lodging use is only available for the summer season. It gives a still different insight (see Table 6).

Table 6. Tourists Total Summer Expenditures (Lodging)

Lodging Type Used	All Expenditures Percentage	Average Per Person Day Dollars
Commercial Room (Motels, Resorts, Condos)	58	12.70
Camp	21	6.40
Second Home	14	7.40
Friends and Relatives	7	8.90
Total Percentage	100	
Total Dollars by Overnight Tourists	$10,758,000	
Average of All Overnight		9.50

Those staying in commercial rooms spend twice as much per person-day for all purposes as those who are camping. Thus their economic return to the North Shore economy is more important than their numbers indicate. Comparing the information in Tables 5 and 6, tourists staying with friends and relatives spend at a rate close to the average. Therefore their dollar return is almost proportional to their days spent on the North Shore.

TOURISTS BUY FROM EVERYONE!

What other businesses do North Shore tourists contribute to beside lodging facilities? The surprising answer is that lodging does not even get the largest share of the tourist dollars.

Table 7. Expenditure Pattern by Summer Tourists

Expenditure Purpose	Dollars	Percentage
Food and Beverage	4,189,000	37
Lodging	3,822,000	33
Transportation (Mostly Auto)	1,797,000	16
Recreation	263,000	2
Shopping, Retail Purchases	1,282,000	11
Other	92,000	1
Total 1981 Summer	11,445,000	100

Note: This information includes those not staying overnight, as well as those lodging on the North Shore.

"Food and beverage" is the largest single type of purchase made by all summer tourists. It includes not only expenditures in restaurants and bars but also in grocery stores. Altogether it amounted to 37 cents of each dollar.

Transportation at 16 cents of each summer tourist's dollar was another important item. It consists mainly of automobile services and fuel.

Retail purchases at an average of 11 cents per dollar are significant items for some travelers. Those traveling for personal business (which includes shopping) made 19 percent of their expenditures for "other retail items." These purchases are made in many kinds of businesses — clothing, drug, hardware, and sports stores among them.

Other observations add depth to the understanding of tourists spending. Recreational expenditures at only 12 cents appear unimportant. But winter tourists staying in Cook County spent 15 percent of their dollars for "winter sports." Those owning second homes made 28 percent of their expenditures on the buildings themselves — for new additions and maintenance. These purchases would be for building supplies, hardware and labor. They also spent 14 percent for utilities. In addition, these second homeowners paid out 23 percent of their total expenditures on the North Shore for taxes. Taxes paid by tourist owners of second homes and recreational properties (without buildings) in Lake and Cook Counties total to nearly one-million dollars annually. These illustrate direct benefits to almost all parts of the North Shore economy by tourists.

SEASONALITY

One of tourism's problems is its seasonal character. Much employment is seasonal, and the investment in a physical plant for heating must be maintained even though it is used only part of the year. Most industries have seasonal variations. Seasonal highs and lows result because a tourism experience must be produced at the same time that it is consumed. Unlike a tangible product it cannot be manufactured and stored for later sale. Table 8 illustrates the difficulty. Half the tourist income is received in the three months of the summer season. The summer season is 3½ times larger than winter (the smallest season). Some parts of the North Shore have made substantial progress in reducing this problem, as will be discussed later.

Table 8. Tourism By Seasons

Season	Person Trips Percentage	Dollars Percentage
Winter	16	14
Spring	21	16
Summer	40	50
Fall	23	20
Total Percentage	100	100
Numbers	1,365,000	$24,500,000

CONTINUING DYNAMICS: THE FUTURE

Now, after two decades of relatively slow growth, North Shore tourism markets may be approaching a stage of take off into a renewed growth mode. There are positive indicators that support this conclusion.

Among the indications of resurgance in industrial growth are the following:

- A growing number of alert, cepable managers have taken over operation of hospitality-tourism related businesses.
- New and/or improved tourist information services are offered at Grand Marais, Two Harbors and at other points.
- Progress has been made toward extending the tourist season and/or reducing the seasonal problem. Some resort operators now report September business that is as large as that in June. Winter business has developed in several parts of the North Shore. One example of this is the Lutsen-Tofte area where cross-country skiing and other winter activities have been added to downhill skiing. The seasonal pattern is changing greatly.

Table 9 Lodging Registrations by Season

Season	Lutsen-Tofte Percentage	Grand Marais Percentage
Winter	28	5
Spring	10	8
Summer	40	65
Fall	22	22
Total for 1981	100	100
Rental Facilities Available	384	259

Tofte-Lutsen now reports 70 percent as many lodging registrations in winter as in summer. This compares with nearby Grand Marais that reports only 8 percent as many winter registrations as in summer. The Two Harbors area recently upgraded its attractiveness for tourists. This includes an on-going program of making the harbor front accessible and usable for recreation, numerous downtown additions, and the recent addition of an information station and municipal campground. New, private investment in recreational lodging is in progress at Two Harbors and Lutsen-Tofte.

TOURISM'S RELATIVE ECONOMIC ADVANTAGE

The resurgence of the North Shore tourism industry appears solidly based. Tourism now offers the best relative advantage for economic growth available to the North Shore economy.

- It is one of only a few places in rural Minnesota that has advanced to this stage. In a five-year assessment study, overall tourism sales were stable in real terms. But selected firms expanded their sales by as much as two to three times.
- Tourism's economic scale at $24.5 million is currently a major contributor to the North Shore economy. It is the major factor in Cook County.
- Tourism, even though showing slow relative growth over recent decades, has none the less been stable. Short-term energy limitations, a negative factor not likely to be prominent in the immediate future, have figured importantly in such unstability as there has been (see also **Needs Assessment for Firms Serving the Boundary Waters Canoe Area Wilderness,** Agricultural Extension Service, University of Minnesota, 1980).
- Other major area industries, mining and forest products, have been subject to serious boom-bust cycles. They have suffered seriously from international competition. (It has already been noted that tourism also has the same problem of international competition, but the above-noted resurgence has occurred none the less.)

Every effort should be made to develop a balanced economy. Sole concentration on tourism is not desirable. In addition to mining and forest products, there may be potential in commercial fishing, power production, manufacturing, agriculture and other economic activities. Over a wide range these may be complementary with tourism and its expansion.

GROWTH AREAS

The major strengths found from this and related studies include the following. North Shore tourists now appear more up-scale than a decade earlier. A study in 1969 showed North Shore tourists to be about average for the society. This 1981 study found them substantially above average in education and income.

Table 10. Socioeconomic Levels

Characteristic	North Shore Tourists	U.S. Population
Percentage with Some College Education	75-79%	33%
Percentage with $35,000 and Over Household Income	33-36%	26%

Tourists report a high level of satisfaction with hospitality services (food and lodging). Eighty-eight percent were "satisfied" or "very satisfied." And, significantly, those with highest incomes were the best satisfied. The businesses are now delivering a quality product. Market studies in Chicago, and other midwestern cities beyond Minnesota's borders, show that upper income people there who travel want the things that the North Shore offers in a very high proportion. Tests of midwestern market response to northeastern Minnesota marketing efforts have verified this demand. One series of newspaper advertisements produced 5,000 requests for information.

Table 11. Vacation Plans of Chicago Residents*

Recreational Activity	Made a Recent Northern MN Trip Percentage	All Others Who Vacationed Percentage
Fishing	64	37
Canoeing	34	18
Hiking	58	44
Cross Country Skiing	15	11
Downhill Skiing	20	15
Historical Site Visitation	67	75
Fall Color Viewing	74	71
Natural Area Visitation	91	85

*Sample from Chicago Census Tracts having incomes in upper two-thirds. Percentages show the proportions of each subsection who include the activity in their vacation plans.

Tourists currently using the North Shore rank its visual aesthetics very high, 4.7 to 4.8 out of a possible perfect ranking of 5. In addition a surprisingly high proportion report active involvement in the out-of-doors; for example 65 percent of summer tourists reported doing some hiking. As a consequence of the above, natural resources, including especially high quality visual aesthetics, appear a major strength to build upon, while their quality is maintained. Tourists report high level of visual satisfactions despite the presence of numerous cities, residences, and hospitality services on the North Shore. This indicates that present development has not obliterated natural appeals. Many man-made facilities are sited off the road, screened, or are not of such scale as to overpower natural elements. These appear as lessons and strengths to draw upon in the future. North Shore weather is a natural resource of significance. No other large area of the U.S. has the degree of natural summer air-conditioning. Winter snows may be the most dependable in the U.S. outside of high mountain areas. Winter can be "sold." Interpretive history, fur trade, forestry, mining, shipping, and fishing can also be capitalized upon.

CONCLUSIONS

Some possible conclusions: many of the current North Shore tourists are relatively affluent. This would be compatible with observed trends. Demand for similar recreational experiences by upper income segments in midwestern cities outside of Minnesota indicates that the "natural" qualities of the North Shore are in demand from a distance. This suggests potential for expanding the markets beyond Minnesota citizens, the current major supplier of North Shore tourists.

Such expansion to people with buying power has other advantages. One current problem is crowding of highways by recreators making shore incursions from nearby. If a large number of more distant tourists can be attracted they can increase tourism profits, jobs, and the tax base out of proportion to their addition to highway congestion.

Marketing to such segments successfully requires answers to the following questions:

- What marketing programs can get to these market segments and induce them to come to the North Shore?
- What provisions for things to see and do will encourage them to stay for a short period?
- What hospitality facilities — types, qualities and quantities — are needed for them?
- How can the outstanding appeals of the North Shore be maintained and improved for enjoyment of residents and visitors over time?

Research Note Number 5
September 1983

This project was sponsored by the Minnesota Sea Grant Insitute, under Grant Nos. NA81AA-D-00114 and NA82AA-D-00039 under project number R/C-4. The Sea Grant Program is supported by the NOAA Office of Sea Grant, the Department of Commerce, and the University of Minnesota. Sea Grant is located at 116 Classroom-Office Building, 1994 Buford Avenue, St. Paul 55108, and is dedicated to wise use of our nation's coasts for this generation and generations to come. Copies of this publication may be obtained free of charge by writing the Institute, ATTN: Editor.

Further information on North Shore tourism and recreation can be obtained from the following publications.

1. Ballman, G., *Managing the Environment for Diverse Recreation: Cross Country Skiing in Minnesota.*, Bulletin 544, Agric. Experiment Station, U of MN, 1981.
2. Ballman, G., "Operationalization, The Cross Country Skiing Opportunity Spectrum," *Proceedings*, North American Symposium on Dispersed Winter Recreation, St. Paul, 1980.
3. Blank, U. and L. Simonson, *Recreational Resource Use: Who Gains? Who Pays? The Crow Wing Canoe Trail Case*, Staff Paper P82-1, Dept. of Agric. & Applied Econ., U of MN, 1982.
4. Blank, U., *Duluth-Superiors Travel-Tourism Economy*, Staff Paper P82-14, Dept. of Agric. & Applied Econ., U of MN, 1982.
5. Blank, U., *Life Style — Tourism Interrelationships of Minneapolis-St. Paul Residents*, Staff Paper P82-9, Dept. of Agric. & Applied Econ., U of MN, 1982.
6. Blank, U. *The Food Service Industry, Its Anatomy and Prognosis*, Staff Paper P81-8, Dept. of Agric. & Applied Econ., U of MN, 1981.
7. Blank, U., L. Simonson, G. Ballman, *et al.*, *A Needs Assessment of Tourism Firms Serving the BWCAW Vicinity*, Agric. Ext. Service, U of MN, 1980.
8. Blank, U. and M. Petkovich, *Minneapolis-St. Pauls Travel-Tourism* (Executive Summary), U of MN, 1979.
9. Blank, U., L. Simonson, and D. Larsen, *So Your Community Wants Tourism?*, Agr. Ext. Service, U of MN, Extension Folder 379, 1978.
10. Blank, U., *An Information/Direction/Interpretation System For Minnesota Counties*, Agric. Ext. Service, U of MN, Slide Tape 277, 1978.
11. Blank, U., "Minnesota's Water Resources and Its Recreation and Tourism," *Proceedings:* Minnesota's Water Resources in the Year 2000. Water Resources Research Center, U. of MN, 1977.
12. Blank, U., and D. Christopher, "Who Uses State Lakes and For What?," *MN Tourist Travel Notes*, U of MN, Winter 1977.
13. Blank, U., L. Simonson and D. Larsen, "Minnesota's Resort-Tourism In Critical Transition," *Minnesota Tourist Travel Notes*, Agric. Ext. Service, U of MN, Vol. 15. Number 2, Fall 1977.
14. Blank, U., "A Concept of Recreational Focal Areas," *Proceedings:* Institute of Traffic Engineers, Minneapolis, MN, 1973.
15. Blank, U., "Tourism in the Lake of the Woods-Rainy Lake Area," *Minnesota Agricultural Economist*, Dept., of Agric. & Applied Econ., U of MN, Nov. 1971.
16. Cooper, R., S. Sadowski and M. Kantor, *Winter Recreation Visitor Study*, Recreation Resources Center, U of WI, Madison, 1979.
17. Knopp, T. and U. Blank, *The North Shore Recreational Experience*, Minnesota Sea Grant, U of MN, in process.
18. Snyder, R., "Seasonal Homes Benefit Rural Minnesota," *Minnesota Science*, U of MN, in process.
19. *Chicago Markets for BWCA Vacation*, Midcontinent Surveys, Inc., for Agric. Ext. Service, U of MN, 1980.
20. *Midwest Markets for BWCA Vacations*, Midcontinent Surveys, Inc., for Agric. Ext. Service, U of MN, 1981.
21. *Minnesota, A State Guide*, Hastings House, NY, 1938.
22. *United States Census of* Business, Bureau of the Census, U.S. Department of Commerce. North Shore overall economic estimates are made by calculations using these sources.